

**AMA/Specialty Society RVS Update Committee
Renaissance Hotel, Chicago, IL
April 25-28, 2018**

Meeting Minutes

I. Welcome and Call to Order

Doctor Peter Smith called the meeting to order on Friday, April 27, 2018 at 8:00 a.m. The following RUC Members were in attendance:

Peter K. Smith, MD	Amr Abouleish, MD, MBA*
Jennifer Aloff, MD	Gregory L. Barkley, MD*
Margie C. Andreae, MD	Joseph Cleveland, MD*
Michael D. Bishop, MD	William D. Donovan, MD, MPH*
James Blankenship, MD	Jeffrey P. Edelstein, MD*
Robert Dale Blasier, MD	William F. Gee, MD*
Jimmy Clark, MD	Michael J. Gerardi, MD, FACEP*
Scott Collins, MD	Gregory Harris, MD*
Gregory DeMeo, MD	John Heiner, MD*
Verdi. J DiSesa, MD, MBA	Peter Hollmann, MD*
David C. Han, MD	Gwenn V. Jackson, MD*
David F. Hitzeman, DO	John Lanza, MD*
Katharine Krol, MD	Mollie MacCormack, MD, FAAD*
Walter Larimore, MD	Scott D. Oates, MD*
Alan Lazaroff, MD	Joseph Schlecht, DO*
M. Douglas Leahy, MD, MACP	M. Eugene Sherman, MD*
Alnoor Malick, MD	Michael J. Sutherland, MD, FACS*
Scott Manaker, MD, PhD	Donna Sweet, MD*
Bradley Marple, MD	Timothy H. Tillo, DPM*
Daniel McQuillen, MD	G. Edward Vates, MD*
Dee Adams Nikjeh, PhD	Thomas J. Weida, MD*
Gregory Przybylski, MD	David Wilkinson, MD, PhD*
Marc Raphaelson, MD	Robert M. Zwolak, MD, PhD*
Christopher K. Senkowski, MD, FACS	
Ezequiel Silva III, MD	
Norman Smith, MD	
Stanley W. Stead, MD, MBA	
James C. Waldorf, MD	
Jennifer L. Wiler, MD, MBA	
George Williams, MD	

*Alternate

II. Chair's Report

Doctor Smith welcomed everyone to the RUC Meeting. He thanked RUC staff for a true Chicago experience at the Cubs roof top outing on Thursday evening.

- Doctor Smith welcomed the Centers for Medicare & Medicaid Services (CMS) staff and deferred introducing the CMS representatives to Doctor Hambrick during her report.
- Doctor Smith welcomed the following Contractor Medical Directors:
 - Charles Haley, MD, MS, FACP
 - Richard W. Whitten, MD
- Doctor Smith welcomed the following Member of the CPT Editorial Panel:
 - Kathy Krol, MD – CPT RUC Member
- Doctor Smith welcomed the following Observer:
 - Brian DeBusk, PhD – Medicare Payment Advisory Commission (MedPAC)
- Doctor Smith congratulated the following new RUC Members:
 - Jennifer Aloff, MD – Primary Care Rotating Seat
 - Allan Anderson, MD - American Psychiatric Association (APA)
 - Daniel McQuillen, MD – Infectious Diseases Society of America (IDSA)
- Doctor Smith congratulated the following new RUC Alternate Members:
 - Gregory Harris, MD - American Psychiatric Association (APA)
 - John Heiner, MD – American Academy of Orthopaedic Surgeons (AAOS)
 - Lawrence Martinelli, MD – Infectious Diseases Society of America (IDSA)
 - Donna Sweet, MD – American College of Physicians (ACP)
- Doctor Smith wished a fond farewell to the following departing RUC Member:
 - Gregory Przybylski, MD – American Association of Neurological Surgeons (AANS)
Thank you for 17 years of service as a RUC member.
- Doctor Smith explained the following RUC established thresholds for the number of survey responses required:
 - Codes with ≥ 1 million Medicare claims = 75 respondents
 - Codes with Medicare claims between 100,000-999,999 = 50 respondents
 - Codes with $< 100,000$ Medicare claims = 30 respondents
 - Surveys below the established thresholds for services with Medicare claims greater than 100,000 will be reviewed as interim and specialty societies will need to resurvey for the next meeting.
- Doctor Smith conveyed the following guidelines related to confidentiality:
 - All RUC attendees/participants are obligated to adhere to the RUC confidentiality policy. (All signed an agreement electronically prior to this meeting.)
 - This confidentiality is critical because CPT® codes and our deliberations are preliminary. It is irresponsible to share this information with media and others until CMS has formally announced their decisions in rulemaking.
- Doctor Smith shared the following procedural rules for RUC members:
 - Before a presentation, any RUC member with a conflict will state their conflict. That RUC member will not discuss or vote on the issue and it will be reflected in the minutes.
 - RUC members or alternates sitting at the table may not present or debate for their society.
 - Expert Panel – RUC members exercise their independent judgment and are not advocates for their specialty.

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

- 1) a specialty surveyed (LOI=1) or
 - 2) a specialty submitted written comments (LOI=2).
- RUC members from these specialties are not assigned to review those tabs.
- The RUC also recommended that the RUC Chair welcome the RUC Advisor for any specialty society that submitted written comments (LOI=2), to come to the table to verbally address their written comments. It is the discretion of that society if they wish to sit at the table and provide further verbal comments.
- Doctor Smith relayed the following procedural guideline related to presentations:
 - If RUC Advisors/presenters need time to review new resources/data brought up during discussion of a tab, they should notify the RUC Chair.
 - Doctor Smith shared the following procedural guidelines related to voting:
 - RUC votes are published annually on the AMA RBRVS website each July for the previous CPT cycle.
 - The RUC votes on every work RVU, including facilitation reports.
 - If members are going to abstain from voting because of a conflict or otherwise, please notify AMA staff so we may account for all 28 votes.
 - Please share voting remote with your alternate if you step away from the table to ensure 28 votes.
 - Doctor Smith announced that all meetings are recorded for AMA staff to accurately summarize recommendations to CMS.

III. Director's Report

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

- For the Facilitation ballots, please put the appropriate precise RVU that is being suggested and not a range.
- A reminder to be sure that the most recent RUC Database has been downloaded. This second version for 2018 includes both the 5% sample file for 2016 and the 2017 estimated utilization data. Also includes a different date field so that when the data is exported, it can be sorted by date of review.

IV. Approval of Minutes from January 2018 RUC Meeting

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

V. CPT Editorial Panel Update (Informational)

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

- CPT Editorial Panel Meeting Activity. The Panel last met in February 2018:
 - In response to code 20005 being identified as a potentially misvalued Harvard code with a negative IWPUP and Medicare utilization over 1,000, the specialties submitted a request to delete this code, which the Panel approved.

- In response to the RUC's recommendation at its October 2017 meeting to provide a parenthetical note after the deletion note for code 27370 clarifying the appropriate reporting of codes 20610 and 20611, the Panel added a note directing users to codes 20610 and 20611 for arthrocentesis of the knee or injection of any material other than contrast for subsequent arthrography.
- In response to the RUC's referral of ophthalmoscopy codes 92225 and 92226 to better specify what portion of the eye is being subjected to an examination well beyond the normal comprehensive eye exam, codes 92225 and 92226 were deleted and two new codes were added specifying extended ophthalmoscopy with retinal drawing and scleral depression, of peripheral retinal disease and with drawing of the optic nerve or macula.
- The Panel revised the Category I/III Code Change Application by adding a new question to track "practice expense only" services; and new instruction clarifying literature requirements for editorial revisions and new and revised codes from RUC-generated referrals.
- The Panel revised the Short Form Code Change Application by adding the screens "CMS Fastest Growing Procedure" and "negative IWPUT", removing the screens "pre-time analysis" and "Multi-Specialty Points of Comparison", adding a choice for "other", and adding space for applicants to indicate the AMA staff person who was consulted regarding the appropriate use of the Short Form.
- The February meeting was Marie Mindeman's last Panel meeting as she is retiring in early May. Zach Hochstetler will be assuming the role of Secretary to the CPT Editorial Panel and Director of CPT Editorial and Regulatory Services.
- The Panel's next meeting is May 17-19, 2018 in San Antonio, TX. RUC member Stanley Stead, MD, will attend the meeting as the RUC representative.
 - Agenda items that may be of interest to the RUC are:
 - Tab 10-Orthopedic Drug Delivery Implant Procedures
 - Tab 12-Tissue Grafting Procedures
 - Tab 16-Pericardial Drainage Procedures
 - Tab 22-Lumbar Puncture
 - Tab 26- Cyclophotocoagulation
 - Tab 27-Gastrointestinal Tract Imaging
 - Tab 28-Myocardial PET
 - Tab 34-Auditory Function Evaluation-Revise 92626, 92627
 - Codes on the May agenda that have been identified by RAW screens are codes 62270, 66711, Gastrointestinal tract imaging codes in the 742XX section, 78492, 92626, and Long-term EEG codes.
 - Long-Term EEG Monitoring Services
 - Extensive work was invested by the Panel and various stakeholders for the long-term EEG Monitoring Services codes, at the June, September, and February Panel meetings. In February, the Panel provided the applicants with additional questions and postponed consideration of the request to time certain May 2018 to allow the applicants and interested stakeholders time to address the Panel's questions.
- The next application submission deadline is June 25, 2018 for the September Panel meeting.

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

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

- Personnel changes within the Hospital and Ambulatory Policy Group were announced:
 - Ryan Howe is on detail to the Division of Ambulatory Services as Acting Director, so the new Acting Director of the Division of Practitioner Services is Nisha Bhat.
 - Marge Watchorn remains Deputy Director of the Division of Practitioner Services.
- CMS is working on the NPRM for the Medicare Physicians' Payment Schedule for CY2019. Please reach out to CMS *as soon as possible* about any issues regarding codes or policy proposals.
- Doctor Hambrick introduced staff from CMS attending this meeting:
 - Karen Nakano, MD – Medical Officer
 - Michael Soracoe, PhD – Research Analyst
 - Pamela Villanyi, MD, MS – Medical Officer, Center for Program Integrity
 - Emily Yoder – Research Analyst
 - Pierre Yong, MD – Medical Officer
 - Marge Watchorn - Deputy Director, Division of Practitioner Services

VII. Contractor Medical Director Update (Informational)

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

- Jurisdiction J (AL, GA, TN) awarded its contract to Palmetto last summer and the transition is now complete.
- Jurisdiction F (AK, AZ, ID, MT, ND, OR, SD, UT, WA, and WY) re-bid is underway with an announcement expected this quarter.
- A major claims processing effort is underway as a result of the Bipartisan Budget Act of 2018, signed into law on February 9th. The Act included a number of Medicare provisions that were retroactive to the first of the year resulting in the reprocessing of many claims that had already been paid. Please see MLN Matters MM10531 “Claims Processing Actions to Implement Certain Provisions of the Bipartisan Budget Act of 2018” for more information.

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

Dr. Kurt Gillis, AMA Principal Economist, provided an update on Medicare Physician Spending Growth for 2017: Early Estimates.

- A presentation was given to review the analysis of an early version of the Medicare Physician/Supplier Procedure Summary files (PSPS) for 2017.
 - Estimates are based on claims for 2017 processed through December 31, 2017 (>90% complete).
 - Spending changes broken down into changes in pay, utilization and site of service.
 - Summarized by BETOS category (old version).

- Medicare Physician Fee Schedule (MFS) Services
 - Provided to Part B fee-for-service enrollees (34 million in 2017)
 - Account for 23% of Medicare Part B spending
 - Account for 10% of total Medicare spending
- Medicare Physician Spending by Type of Service 2017 (estimated)
 - E/M 51%
 - Procedures 32%
 - Imaging 10%
 - Tests 6%
 - Other 1%
- Results for 2017 – Overall
 - Medicare physician spending increased 2.2% due to:
 - Increase in utilization per enrollee (2.1%)
 - Increase in pay (0.2%)
 - Not much variation in pay or utilization changes by BETOS
- Results for 2017 – Imaging
 - 5% increase in spending
 - 3% increase in utilization per enrollee
 - 2% increase in pay
 - Significant utilization changes:
 - 6% increase for Advanced Imaging (CPT 70496, 78492)
 - Significant pay changes:
 - 2% increase for Advanced Imaging (CPT 70450, 70498)
 - 2% increase for Echography (CPT 93880, 93925)
- Results for 2017 – Evaluation and Management (E/M)
 - 2% increase in spending
 - 2% increase in utilization per enrollee
 - 0% pay change
 - 2% increase in utilization of Office Visits
 - 1% increase in use of New and Established Office Visits (CPT 99214 is now 11% of fee schedule spending)
 - 15% increase in use of Wellness Visits (8.3 million provided in 2017 including Welcome to Medicare visit)
 - 31% increase in utilization for “Care Planning and Management”. Includes:
 - *Transitional Care Management* - 2017 frequency of 1.1 million (18% increase from 2016)
 - *Chronic Care Management* - 2017 frequency of 3.5 million (43% increase from 2016)
 - *Advance Care Planning* - 2017 frequency of 1.1 million (76% increase from 2016)
- Results for 2017 – Procedures
 - 2% increase in spending
 - 2% increase in utilization per enrollee
 - 0% increase in pay

- Significant utilization changes:
 - 7% increase for Physical Therapy (CPT 97112, 97530)
 - 2% decrease for Oncology (CPT 96416)
- Significant pay changes:
 - 4% decrease for Endoscopy (CPT 31579, 43239, 45380, 52000)
- Results for 2017 – Tests and Other
 - 0% increase in spending
 - 2% increase in utilization per enrollee
 - -2% change in pay
 - Significant utilization changes:
 - 8% increase for EKG Monitoring (CPT 93229)
 - Other Services:
 - 138% increase in use of G9678 (Oncology care model service)
- Utilization Growth for 2017 by Major BETOS
 - Imaging 3%
 - E&M 2%
 - Procedures 2%
 - Tests 2%
- Summary
 - Moderate (2%) growth in spending and utilization for 2017
 - Near zero average change in pay (0.2%)
 - Utilization changes were fairly uniform by type of service with some exceptions
 - Advanced Imaging (6% growth)
 - Care Planning and Management (31% growth)
 - Physical Therapy (7% growth)
 - Estimates will be revised in the Fall when final data is received.
- With respect to the increase in use of CPT code 93229, CMS asked whether the 8% increase was due to an increase in utilization or pay. According to Doctor Haley, it was due to a “dramatic increase in the number of services.”
- The discussion turned to a question about CPT code 93299 and why that code remained carrier-priced despite a RUC recommendation for PE direct inputs. According to the Final Rule, CMS had concerns that if they adopted the RUC recommendations, there would be significant payment reductions so it remained carrier-priced. **The RUC will query CMS as to whether CPT code 93299 should come back to the PE Subcommittee at the fall meeting.**
- A RUC member asked about how CPT code G9678 is priced. It is part of an ongoing demonstration project so it is priced through the Center for Medicare & Medicaid Innovation.

IX. Relative Value Recommendations for CPT 2019

Hemi-Aortic Arch Replacement (Tab 4)

James M. Levett, MD (STS); Stephen J. Lahey, MD (AATS); Kirk R. Kanter, MD (STS)

At the September 2017 CPT Editorial Panel meeting, the Panel created one new add-on code to report hemi-aortic arch graft replacement. Existing CPT codes 33860, 33863 and 33864 were identified as family codes for review at the January 2018 RUC meeting. At the January 2018 RUC meeting, the specialty societies only presented survey data and a recommendation for new CPT code 33866. The specialties did not survey the ascending aortic replacement codes 33860, 33863 or 33864 for the January 2018 RUC meeting and provided their rationale for not surveying the codes to the RUC at the meeting. Although the new add-on code was designed to be reported with the ascending aortic replacement codes, 33860, 33863 or 33864, the specialty societies noted that the work involved in the hemi-aortic arch replacement procedure represented an advancement in surgical technique that has evolved over the past five years and did not reflect work that is currently accounted for in the ascending aortic procedures. The specialty societies indicated that the hemi-aortic arch replacement is more closely related to the transverse aortic arch replacement code 33870. At the January meeting, the RUC recommended an interim value for new CPT code 33866 and for the full family of services to be surveyed and presented at the April 2018 RUC meeting, including codes 33860, 33863, 33864, 33866, 33870. The RUC observed that the current draft parenthetical following CPT code 33870, did not preclude 33870 from being coded with base codes 33860-33864 nor did it direct users to instead use 33866 when hemi-aortic arch graft replacement is performed. The RUC recommended that the CPT Editorial Panel consider parenthetical additions for CPT code 33870. The RUC referred the entire family of codes for review at the April 2018 RUC meeting. Accordingly, at the February 2018 CPT Editorial Panel meeting, the Panel revised the introductory language in addition to parentheticals for code 33870 to clarify that the code is not reported for hemi-aortic arch graft.

At the April 2018 RUC meeting, the specialty societies noted that during their preparations for the April 2018 RUC meeting, they determined that this family of services should be submitted to the CPT Editorial Panel for the following revisions: 1) To develop distinct codes for ascending aortic repair for dissection and ascending aortic repair for other ascending aortic disease such as aneurysms and congenital anomalies. The specialties expressed that there is a sufficient difference in the work associated with these procedures and now there is sufficient volume to allow for more accurate capture of the work and outcomes data for these distinct patient populations, which was not the case when the code was first developed. 2) Revise the descriptor for the transverse arch code, 33870 to further clarify the difference in work between that code and the new add-on code 33866. 3) Revise the guidelines to provide additional instructions on the appropriate use of these codes. The specialty societies already submitted a new coding proposal for consideration at the May 2018 CPT Editorial Panel meeting for CPT 2020. **The RUC supports referral to CPT. The RUC rescinds the interim value recommendation to CMS for code 33866 for CPT 2019.**

X. Relative Value Recommendations for CPT 2020

Ophthalmoscopy (Tab 5)

David B. Glasser, MD (AAO); John T. McAllister, MD (AAO); John T. Thompson, MD (ASRS); Charlie Fitzpatrick, OD (AOA)

In April 2017, CPT code 92225 was identified via the negative intra-service work per unit of time (IWPUT) screen. In October 2017, the specialty society indicated that there needs to be modification of the descriptor of 92225 and 92226 to better specify what portion of the eye is being subjected to an examination well beyond the normal comprehensive eye exam. The RUC referred this issue to the CPT Editorial Panel. In February 2018, the CPT panel deleted 92225 and 92226 and created two new codes to specify what portion of the eye is examined for a service beyond the normal comprehensive eye exam. The deleted codes were unilateral whereas the new codes are unilateral or bilateral. In addition, unlike the current code structure, the new codes make no distinction between initial and subsequent drawings.

92201 Ophthalmoscopy, extended; with retinal drawing and scleral depression, of peripheral retinal disease (eg, for retinal tear, retinal detachment, retinal tumor) with interpretation and report, unilateral or bilateral

The RUC reviewed the survey results from 104 physicians and recommends the following physician time components: pre-service time of 1 minute, intra-service time of 10 minutes, and immediate post-service time of 1 minute, for a combined total of 12 minutes. The RUC determined that a work RVU of 0.40, which is below the survey 25th percentile, appropriately accounts for the physician work involved to perform this service. Since the procedure is typically done on the same day as an office visit, the survey pre-service time was reduced to 1 minute to remove any overlapping time associated with an Evaluation and Management (E/M) service. The 1 minute of pre-service time, which is distinct from the same day E/M visit, is to separately discuss the procedure with the patient and re-anesthetize the eye. The survey post-service time was also reduced from 5 minutes to 1 minute to remove any potential overlap with the same-day E/M service – the 1 minute is for entering the report findings into the medical record. The survey 25th percentile work value was higher than the value of both existing CPT codes 92225 and 92226. The specialty societies noted that this service is now typically performed bilaterally. The RUC noted that codes 92225 and 92226 were unilateral (ie could be reported twice if performed on both eyes) and the new codes can only be reported a single time (even if performed on both eyes). To justify the recommended work RVU of 0.40, the RUC cross-walked the survey code with the second key reference service code 92250 *Fundus photography with interpretation and report* (work RVU= 0.40, pre-service time of 1 minute, intra-service time of 10 minutes, immediate post-service time of 1 minute, and total time of 12 minutes), which is an MPC code and noted that both services require identical times and physician work. Additionally, the RUC referenced code 92133 *Scanning computerized ophthalmic diagnostic imaging, posterior segment, with interpretation and report, unilateral or bilateral; optic nerve* (work RVU= 0.40, pre-service time of 1 minute and intra-service time of 10 minutes), and found that the survey code is appropriately valued because it requires identical intra-service time and similar total time, which further supports a work value of 0.40. **The RUC recommends a work RVU of 0.40 for CPT code 92201.**

92202 Ophthalmoscopy, extended; with drawing of optic nerve or macula (eg, for glaucoma, macular pathology, tumor) with interpretation and report, unilateral or bilateral

The RUC reviewed the survey results from 62 physicians and agreed with the following physician time components: pre-service time of 1 minute, intra-service time of 5 minutes and immediate post-service time of 1 minute, for a combined total of 7 minutes. The RUC determined that a work RVU of 0.26, which is below the survey 25th percentile, appropriately accounts for the physician work involved to perform this service. Since the procedure is typically done on the same day as an office visit the pre-

service time was reduced to 1 minute to remove any work associated with the E/M. The 1 minute of pre-service time, which is distinct from the same day E/M visit, is to separately describe the procedure to the patient and re-anesthetize the eye. The survey post-service time was reduced from 4 minutes to 1 minute to remove any potential overlap with the same-day E/M service – the 1 minute is for entering the report findings into the medical record. The survey 25th percentile work value was higher than the current value of both existing CPT codes 92225 and 92226. The RUC noted this service is typically performed bilaterally. The RUC noted that 92225 and 92226 were unilateral (ie could be reported twice if performed on both eyes) and the new codes can only be reported a single time (even if performed on both eyes). To justify the recommended work RVU of 0.26, below the survey 25th percentile, the RUC cross-walked the surveyed code to MPC code 72081 *Radiologic examination, spine, entire thoracic and lumbar, including skull, cervical and sacral spine if performed (eg, scoliosis evaluation); one view* (work RVU= 0.26, pre-service time of 1 minute, intra-service time of 5 minutes, and post-service time of 1 minute), and noted that both services require identical work and times. Additionally, code 92202 requires approximately half of the physician time and work than code 96X18 and therefore is valued appropriately. To further justify a work RVU of 0.26, the RUC reviewed code 73522 *Radiologic examination, hips, bilateral, with pelvis when performed; 3-4 views* (work RVU= 0.29, pre-service time of 1 minute, intra-service time of 5 minutes, and immediate post-service time of 1 minute), and found that the surveyed code is appropriately valued because it requires identical times as code 73522 and is a slightly more intense service to perform. **The RUC recommends a work RVU of 0.26 for CPT code 92202.**

Work Neutrality

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

Practice Expense

The RUC recommends the direct practice expense inputs with one minor modification to correct the equipment time in CPT code 92202.

XI. CMS Request/Relativity Assessment Identified Codes

Closed Treatment Vertebral Fracture (Tab 6)

William Creevy, MD (AAOS); Hussein Elkousy, MD (AAOS); Alexander Mason, MD (CNS); Karin Swartz, MD (NASS); Kano Mayer, MD (NASS); Morgan Lorio, MD (ISASS)

The RUC identified services with a negative IWPUT and Medicare utilization over 10,000 for all services or over 1,000 for Harvard valued and CMS/Other source codes. The RUC recommended that this service be surveyed for April 2018.

22310 Closed treatment of vertebral body fracture(s), without manipulation, requiring and including casting or bracing

Physician work for CPT code 22310 was last reviewed during the Harvard study in the late 1980's.

- In the June 1991 proposed rule, the work RVU for 22310, based on the Harvard study, was 6.31.
- In the November 1991 final rule for the 1992 PFS, the work RVU was reduced to 1.95.
- In 1997, hospital and office visits were assigned by algorithm for practice expense purposes.

The misestimating of visits and change in total work from the Harvard study resulted in a negative IWPUT which resulted in a flawed methodology of the previous valuation and time. Therefore, the RUC noted that a direct comparison of the Harvard time to the current survey time is not appropriate.

The RUC reviewed the survey results from 55 orthopaedic surgeons, neurosurgeons and spine surgeons and determined that the survey 25th percentile physician work RVU of 5.00 and the survey median physician work RVU of 6.25 result in intensities inconsistent with the physician work for 22310. The RUC agreed with the specialty societies' recommendation to crosswalk the service to CPT code 67914 *Repair of ectropion; suture* (work RVU = 3.75, 20 minutes intra-service time). The RUC recommends 19 minutes pre-service time, 20 minutes intra-service time and 25 minutes immediate post-service time, one-half 99238 discharge day management and three 99212 post-operative visits. The RUC agreed with increasing the immediate post-service time from 15 minutes to 25 minutes by applying the CMS and RUC policy for services that typically have a "23-hour stay" to account for a separate typical visit performed on the day of the services. The RUC also agreed that the intensity of the intra-service work to place an orthosis is similar to application of a cast or splint. The crosswalk code 67914 was last reviewed by the RUC in 2013 and has the same intra-time and similar total time. The RUC noted that 22310 is typically an overnight or longer stay, while 67914 is typically same-day discharge which justifies the variation in immediate post-time and visit levels between the services. The specialty societies confirmed that the service is typically used for bracing the spine with a large, rigid PVC plastic brace. The post-operative visits typically are used to order and review imaging in order to monitor the minimally displaced fracture and be certain the status of the fracture does not escalate. The physician also manages pain medication and instructs the patient on activity. The RUC discussed the site of service in the Medicare claims data, which is almost evenly split between the physician office and hospital settings (49.98% vs 49.54%), ultimately finding the survey site of service appropriate for the typical patient when all ages are considered (ie, younger patients are more likely to be poly-trauma).

For additional support the RUC referenced CPT code 21073 *Manipulation of temporomandibular joint(s) (TMJ), therapeutic, requiring an anesthesia service (ie, general or monitored anesthesia care)* (work RVU = 3.45 and 20 minutes intra-service time). The RUC also compared the survey code to MPC codes 46930 *Destruction of internal hemorrhoid(s) by thermal energy (eg, infrared coagulation, cautery, radiofrequency)* (work RVU = 1.61 and 5 minutes intra-service time) and 33213 *Insertion of pacemaker pulse generator only; with existing dual leads* (work RVU = 5.28 and 48 minutes intra-service time) noting that the surveyed code is appropriately bracketed relative to these services. **The RUC recommends a work RVU of 3.75 for CPT code 22310.**

Practice Expense

The PE Subcommittee discussed and passed the compelling evidence that there has been a change in the practice expense inputs for this service. Compelling evidence arguments included a change in the typical specialty and adoption of applicable standards since the service was last reviewed for practice expense. The PE Subcommittee accepted the specialties request for the standard emergent pre-service clinical staff time standards for the facility setting. The service is typically reported 79% with an Evaluation and Management service in the non-facility setting and the specialty societies appropriately removed any duplicative inputs. The only modification to the spreadsheet was to add 2 minutes of clinical staff time for clinical activity CA013, *Prepare room, equipment and supplies* and 2 minutes for CA016, *Prepare, set-up and start IV, initial positioning and monitoring of patient*.

Work Neutrality

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

Tendon Sheath Procedures (Tab 7)

Anne Miller-Breslow, MD (ASSH); William Creevy, MD (AAOS); Hussein Elhousy, MD (AAOS); Mark Villa, MD (ASPS); Jeffrey Kozlow, MD (ASPS)

The RUC identified CPT codes 26020, 26055 and 26160 as services with a negative IWPUR and Medicare utilization over 10,000 for all services or over 1,000 for Harvard valued and CMS/Other source codes. The RUC recommended that these services be surveyed for April 2018.

26020 Drainage of tendon sheath, digit and/or palm, each

Compelling Evidence

The RUC reviewed the information provided by the specialty societies' indicating the physician work for CPT code 26020 *Drainage of tendon sheath, digit and/or palm, each*, was last reviewed during the Harvard study in the late 1980's. The postoperative work to closely monitor these patients in the hospital and in the office was underestimated by the ten general orthopaedic surgeons that responded to the Harvard study. This misestimating of work resulted in a negative IWPUR which is evidence of a flawed methodology to value 26020 during the Harvard review. The RUC agreed that there is compelling evidence that the current work RVU for 26020 may be incorrect.

The RUC reviewed the survey results from 168 hand surgeons, orthopaedic surgeons and plastic surgeons and determined that the survey median work RVU of 7.79 appropriately accounts for the work required to perform this service. The physician pre-time and intra-service time have increased from the Harvard study and supports a work RVU increase. The specialty societies' noted that the typical patient is someone who has sustained a puncture or bite wound resulting in an infection that progresses rapidly. The RUC recommends 33 minutes of pre-evaluation time, 10 minutes positioning time (consistent with other recently reviewed upper extremity services for padding of bony prominences; application of thermal regulation drapes; assessing position of the extremities and head and adjusting as needed; rotating patient onto hand surgery table; marking, prepping and draping hand; application of tourniquet to the proximal arm; elevating and exsanguinating arm; and inflating pneumatic tourniquet.), 10 minutes scrub/dress/wait time, 45 minutes intra-service time, 15 minutes immediate post-operative time, 2-99231 subsequent hospital care visits, 1-99238 discharge management, 1-99213 and 3-99212 office visits. The RUC noted that the majority of patients receiving this procedure will be closely monitored during the postoperative period. The specialty societies indicated that the operation to treat a tendon sheath infection is quite extensive, requiring two or more incisions and tunnelling a catheter for irrigation. Complications may include ruptured tendons and rupture of the A2 pulley, which is the important soft tissue structure at the base of the digit. If the A2 pulley does not work, the finger ends up with a severe contracture. Patients are followed very closely to ensure the finger is as functional possible. The physician establishes a physical therapy plan and monitors range of motion of the wrist, fingers, and thumb because these patients can develop stiffness of the fingers. Orders for splints for contractures and modalities for scar management are included in this plan. The physician also monitors resolution of the infection and discusses antibiotic medication with the infectious disease consultant. The RUC agreed that this work justified the number and level of post-operative office visits.

The RUC compared CPT code 26020 to the key reference services 28002 *Incision and drainage below fascia, with or without tendon sheath involvement, foot; single bursal space* (work RVU = 5.34 and 30 minutes intra-service time, 010 global period) and 64831 *Suture of digital nerve, hand or foot; 1 nerve* (work RVU = 9.16 and 60 minutes of intra-service time) and noted that these services vary greatly on the physician work and time required to perform and were not adequate direct references. However, these references indicate that the survey respondents placed the work value for 26020 between the two references.

The RUC compared the surveyed code to MPC code 26615 *Open treatment of metacarpal fracture, single, includes internal fixation, when performed, each bone* (work RVU = 7.07) and noted that although both codes have an intraoperative time of 45 minutes, code 26615 is an outpatient procedure that requires less postoperative work. CPT code 26020 requires a less direct approach, navigating around nerve and vascular bundles. Therefore, the RUC determined that CPT code 26020 is appropriately valued higher than MPC code 26615 because it requires more complex work. The RUC also compared CPT code 26020 to MPC code 33207 *Insertion of new or replacement of permanent pacemaker with transvenous electrode(s); ventricular* (work RVU = 7.80) and noted that although code 33207 requires 15 minutes of additional intraservice time, the postoperative hospital and office work was less than 26020 and that total time was similar. The RUC agreed that total physician work for 26020 and 33207 was similar. The RUC also compared the surveyed code to 28289 *Hallux rigidus correction with cheilectomy, debridement and capsular release of the first metatarsophalangeal joint; without implant* (work RVU = 6.90 and 45 minutes intra-service time) noting that these services have the same intra-service time, however CPT code 26020 is more complex to performed on an individual with an acute infection and it is an inpatient procedure with inpatient hospital visits, whereas CPT code 28289 is typically performed as an elective outpatient procedure. The RUC believed that CPT code 26020 should be valued greater than 28289 because of the additional inpatient work. The RUC agreed that valuing 26020 at the survey 25th percentile would vastly underestimate the physician work and intensity for this service and that such a value would be inconsistent when compared to 26615, 33207, and 28289. Therefore, based on the above comparisons, the RUC recommends the survey median. **The RUC recommends a work RVU of 7.79 for CPT code 26020.**

A RUC member questioned why the two codes in the CPT book after CPT code 26020 were not included for review as family codes. The specialty societies indicated that CPT codes 26025 *Drainage of palmar bursa; single, bursa* and 26030 *Drainage of palmar bursa; multiple bursa* involve a different part of the anatomy of the hand (bursa versus tendon sheath) are therefore are not family codes.

26055 Tendon sheath incision (eg, for trigger finger)

Compelling Evidence

The RUC reviewed the information provided by the specialty societies' indicating that in April 2005, CPT code 26055 *Tendon sheath incision (eg, for trigger finger)* was nominated by CMS as potentially misvalued through a screen of Harvard-based and CMS/Other source codes with a utilization over 10,000. During the August 2005 presentation of survey data, the specialties noted that no time was allocated for evaluation, positioning and facility post-service work in the Harvard review. The specialties also noted that the 2005 work RVU of 2.69 with the 2005 survey data resulted in a negative IWPUT (-0.037). However, the RUC determined that there was no compelling evidence of a change in work to allow increasing the value of this procedure as recommended by the presenters. The 2005 survey times and visits were related to a survey work RVU of 3.99 and not to the Harvard-based 2005 work RVU of 2.69. The specialty societies' indicated that the previous RUC recommendation—to reject the survey-based work RVU but accept the survey time and visit data—was a flawed methodology because the recommendation resulted in a negative IWPUT. The RUC agreed that there is compelling evidence that the current work RVU for 26055 may be incorrect.

The RUC reviewed the survey results from 168 hand surgeons, orthopaedic surgeons and plastic surgeons and determined that the survey 25th percentile work RVU of 3.75 appropriately accounts for the work required to perform this service. The physician time has decreased from the original Harvard-based physician time; however this should not be used as a comparison as it was flawed in relation to the work RVU as the physician time and work RVUs were obtained at two vastly different time periods (1980's and 2005) as described above. The RUC recommends 13 minutes of pre-evaluation time, 10 minutes positioning time (consistent with other recently reviewed upper extremity services for padding of bony prominences; application of thermal regulation drapes; assessing position of the extremities and head and adjusting as needed; rotating patient onto hand surgery table; marking, prepping and draping hand;

application of tourniquet to the proximal arm; elevating and exsanguinating arm; and inflating pneumatic tourniquet.), 10 minutes scrub/dress/wait time, 18 minutes intra-service time, 10 minutes immediate post-operative time, half-day 99238 discharge management, 1-99213 and 1-99212 office visits. The specialty societies indicated that 10 minutes of immediate postoperative work plus the half-day discharge day correctly accounts for postoperative work that includes application of a dressing, transfer to recovery, discussion of surgery with patient and family, writing an operative note, assessing the neurovascular status of the operated extremity, dictating an operative report and completing documentation in the medical record; discussing aftercare treatment with the patient and family, writing prescription orders, and completing a discharge summary and instructions. The RUC determined that one level 99213 office visit is justified for the first visit when the physician assesses the wound for infection and edema, assesses the neurovascular status of the hand, removes sutures, evaluates range of motion and instructs patient on motion exercises and scar control.

The RUC compared CPT code 26055 to the key reference services 26115 *Excision, tumor or vascular malformation, soft tissue of hand or finger, subcutaneous; less than 1.5 cm* (work RVU = 3.96 and 30 minutes intra-service time) and 26111 *Excision, tumor or vascular malformation, soft tissue of hand or finger, subcutaneous; 1.5 cm or greater* (work RVU = 5.42 and 40 minutes of intra-service time) and noted that the key reference services are both subcutaneous procedures, whereas CPT code 26055 is deeper and although it requires less physician intra-service time, is more intense to navigate around the digital arteries and nerves taking care not to injure these structures during dissection.

For additional support the RUC referenced comparison codes 21073 *Manipulation of temporomandibular joint(s) (TMJ), therapeutic, requiring an anesthesia service (ie, general or monitored anesthesia care)* (work RVU = 3.45 and 20 minutes intra-service time), typically performed in the office setting and 67914 *Repair of ectropion; suture* (work RVU = 3.75 and 20 minute intra-service time), typically performed in the outpatient setting. **The RUC recommends a work RVU of 3.75 for CPT code 26055.**

26160 Excision of lesion of tendon sheath or joint capsule (eg, cyst, mucous cyst, or ganglion), hand or finger

The RUC approved compelling evidence based on the same flawed methodology as indicated for CPT code 26055. However, that argument is not necessary as the RUC recommends maintaining the current work RVU with decreases to the pre-service time and post-operative visits, thus no longer resulting in a negative IWP/UT for CPT code 26160.

The RUC reviewed the survey results from 168 hand surgeons, orthopaedic surgeons and plastic surgeons and disagreed with the initial specialty recommendation of 4.00, the 25th percentile work RVU. The RUC determined that the current work RVU of 3.57 appropriately accounts for the work required to perform this service. The RUC recommends 13 minutes of pre-evaluation time, 10 minutes positioning time (consistent with other recently reviewed upper extremity services for padding of bony prominences; application of thermal regulation drapes; assessing position of the extremities and head and adjusting as needed; rotating patient onto hand surgery table; marking, prepping and draping hand; application of tourniquet to the proximal arm; elevating and exsanguinating arm; and inflating pneumatic tourniquet.), 10 minutes scrub/dress/wait time, 20 minutes intra-service time, 10 minutes immediate post-operative time, half-day 99238 discharge management, 1-99213 and 1-99212 office visits. The RUC determined the level 99213 office visit is justified for the first visit when the physician assesses the wound for infection and edema, assesses the neurovascular status of the hand, removes sutures, evaluates range of motion and instructs patient on motion exercises and scar control.

The RUC noted that CPT codes 26055 and 26160 require almost the same exact physician time and questioned why the work values should not be the same. The specialty societies indicated and the RUC agreed that CPT code 26160 is slightly more intense than CPT code 26055 because CPT code 26160

requires a larger incision and more dissection to not only release the pulley, but also to examine the tendons. The physician extends to the A2 pulley and excises the cystic mass, taking care not to remove too much of the pulley. The RUC compared CPT code 26160 to key reference service 26115 *Excision, tumor or vascular malformation, soft tissue of hand or finger, subcutaneous; less than 1.5 cm* (work RVU = 3.96 and 30 minutes intra-service time) and noted that 26115 requires 10 more minutes of physician intra-service time and therefore should be valued slightly greater than 26160. **The RUC recommends a work RVU of 3.57 for CPT code 26160.**

A RUC member questioned why the two codes in the CPT book after CPT code 26160 were not included for review as family codes. The specialty societies indicated that CPT codes 26170 *Excision of tendon, palm, flexor or extensor, single, each tendon* and 26180 *Excision of tendon, finger, flexor or extensor, each tendon* are infrequently performed procedures that involve resection of an anatomic structure (tendon) and not excision of a lesion (eg, cyst or ganglion) from the tendon sheath and are therefore are not family codes.

Practice Expense

The PE Subcommittee modified the cleaning time to account for the 15 minutes standard for a medium surgical instrument package and reduced the number of safety glasses (SB038) from 2 to 1. A CMS representative questioned the circulating staff for clinical activity, *Assist physician or other qualified healthcare professional---directly related to physician work time (100%)* (CA018), stating that the PE Subcommittee generally does not allocate 100% physician time for the circulator. The specialty societies explained that the first assistant acts as a surgical assistant during the skin to skin work within the sterile area of the procedure room and the second assistant circulates outside the sterile area, providing the surgical team with sterile fluids as needed and also replenishing the surgical team's supplies. The PE Subcommittee discussed that it has generally been the Subcommittee's practice to allow one circulator at 100% physician time. Circulators are not common in the non-facility, however if there is one assistant and one circulator they would both be 100% of the physician time. In some vascular surgery services there are 3 staff including 2 circulators, when there are 2 circulators one would be allocated 75% of physician time and the other would be allocated 25% of physician time. The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.

Closed Treatment Fracture – Hip (Tab 8)

William Creevy, MD (AAOS); Hussein Elkousky, MD (AAOS)

The RUC identified services with a negative IWP/UT and Medicare utilization over 10,000 for all services or over 1,000 for Harvard valued and CMS/Other source codes. The RUC recommended that these services be surveyed for April 2018.

Compelling Evidence

The RUC noted that the physician work for CPT code 27220 was last reviewed during the Harvard study in the late 1980's.

- In the June 1991 Proposed Rule, the work RVU for 27220, based on the Harvard study, was 6.18.
- In the November 1991 Final Rule for the 1992 PFS, the work RVU was reduced to 5.54.
- In 1997, hospital and office visits were assigned by algorithm for practice expense purposes.
- In 2007, the work RVUs were adjusted to account for the increases in the Evaluation and Management services included in the global period of this service, work RVU was 6.72.
- In 2010, the work RVUs were adjusted slightly to account for CMS no longer covering the consultation codes, work RVU was 6.83.

The misestimating of visits and change in total work from the Harvard study resulted in a negative IWPUT which resulted in a flawed methodology of the previous valuation and time. Therefore, the RUC noted that a direct comparison of the Harvard time to the current survey time is not appropriate.

The RUC reviewed the survey results from 51 orthopaedic surgeons for CPT code 27220 *Closed treatment of acetabulum (hip socket) fracture(s); without manipulation* and determined that the survey median work RVU of 6.00 appropriately accounts for the physician work required to perform this service. The RUC recommends 18 minutes of evaluation time, 15 minutes intra-service time, 5 minutes immediate post-operative time, 1-99231 and 1-99232 subsequent hospital care visits, 1-99238 discharge day management and 3-99212 office visits. The specialty societies indicated and the RUC agreed that subsequent hospital care visits are necessary to monitor and adjust the orthosis, order and review imaging to monitor the minimally displaced fracture, and assess patient neurovascular status.

The RUC compared the surveyed code to key reference 27267 *Closed treatment of femoral fracture, proximal end, head; without manipulation* (work RVU = 5.50 and 15 minutes intra-service time) and noted that both services have identical intra-service time, whereas 27220 requires slightly more total time and is slightly more intense. Therefore, a slightly higher work RVU appropriately places the surveyed code relative to 27267. The RUC compared the surveyed code to the second key reference service 25605 *Closed treatment of distal radial fracture (eg, Colles or Smith type) or epiphyseal separation, includes closed treatment of fracture of ulnar styloid, when performed; with manipulation* (work RVU = 6.25 and 30 minutes intra-service time) and noted that 25605 requires double the physician intra-service time and is more intense to perform than 27220, thus appropriately higher. **The RUC recommends a work RVU of 6.00 for CPT code 27220.**

Work Neutrality

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

Practice Expense

The PE Subcommittee noted that the specialty society included only emergent pre-service clinical activity clinical staff time which is the standard for emergent procedures in the facility. When performed in a non-facility, the specialty society did not include clinical activity time associated with an evaluation and management service typically billed on the same day. Two (2) minutes were added for clinical activity, *prepare room, equipment and supplies* (CA013) and clinical activity, *prepare, set-up and start IV, initial positioning and monitoring of patient* (CA016) for positioning the patient when the brace is applied. The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee

Arthrodesis - Sacroiliac Joint (Tab 9)

Alexander Mason, MD (CNS); William Creevy, MD (AAOS); Hussein Elkousy, MD (AAOS); Karin Swartz, MD (NASS); Kano Mayer, MD (NASS); Morgan Lorio, MD (ISASS)

In the Final Rule for 2018, CPT code 27279 was nominated for review as a potentially misvalued code because the current work RVU is potentially undervalued and a stakeholder recommended that it should be increased to 14.23. CMS proposed this code as a potentially misvalued code. The RUC added CPT code 27279 to the list of potentially misvalued services to review in April 2018.

The RUC reviewed the survey results from 76 neurosurgeons, orthopaedic surgeons and spine surgeons for CPT code 27279 *Arthrodesis, sacroiliac joint, percutaneous or minimally invasive (indirect visualization), with image guidance, includes obtaining bone graft when performed, and placement of transfixing device* and determined that the current work RVU of 9.03 appropriately accounts for the physician work required to perform this service. The RUC recommends 33 minutes of pre-evaluation

time, 18 minutes of positioning, 15 minutes of scrub/dress/wait, 60 minutes intra-service time, 34 minutes immediate post-operative time, a half-day 99238 discharge management, 1-99212 and 2-99213 office visits.

CMS describes surgical services that are typically performed in the outpatient setting and require a hospital stay of less than 24-hours as *23-hour stay outpatient services*. In the CY2011 Final Rule, CMS finalized a policy to no longer allow these codes to include bundle subsequent hospital visits (e.g. 99231-99233) into the surgical global period. Instead, the Agency permits the allocation of the intra-service portion of the typically performed subsequent hospital visit to the immediate post-service time of the procedure. The RUC agreed with increasing the immediate post-service time from 24 minutes to 34 minutes by applying the CMS and RUC policy for services that typically have a "23-hour stay" to account for a separate typical visit performed on the day of the service (the survey median immediate post-operative time of 24 minutes plus the intra-service time for 99231 of 10 minutes).

The specialty societies declared that the previous April 2014 valuation of CPT code 27279 was based on flawed methodology that resulted in an underestimation of intraoperative intensity. When code 27279 was surveyed in 2014, the survey process was interfered with by an outside party. The specialty societies at the time coordinated with AMA staff to include a question in the survey inquiring whether the survey respondent had been inappropriately contacted. Anyone that responded in the affirmative was removed from the survey data, resulting in only 28 survey responses in the final results. Due to the dearth of survey data and the RUC's agreement that the survey respondents had somewhat overvalued the work involved in performing this service, the RUC used a direct crosswalk to 62287 *Decompression procedure, percutaneous, of nucleus pulposus of intervertebral disc, any method utilizing needle based technique to remove disc material under fluoroscopic imaging or other form of indirect visualization, with discography and/or epidural injection(s) at the treated level(s), when performed, single or multiple levels, lumbar* to recommend a work RVU of 9.03. The specialty societies indicated that with increased and broader utilization of this technique, the present survey is a more robust assessment of physician work and intensity and provides more data with which to make a crosswalk recommendation.

The RUC determined that there is not compelling evidence as the intensity required to perform CPT code 27279 has not changed. Additionally, the flawed survey data was not utilized in the previous valuation; instead a direct crosswalk was utilized. With no convincing rationale that the physician work, intensity or complexity has changed for this service, the specialty societies recommended maintain the work RVU of 9.03 for CPT code 27279. For additional support, the RUC referenced CPT code 43180 *Esophagoscopy, rigid, transoral with diverticulectomy of hypopharynx or cervical esophagus (eg, Zenker's diverticulum), with cricopharyngeal myotomy, includes use of telescope or operating microscope and repair, when performed* (work RVU = 9.03 and 60 minutes intra-service time), which requires the same physician work and intra-service time to perform. **The RUC recommends a work RVU of 9.03 for CPT code 27279.**

Practice Expense

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

Pericardiotomy (Tab 10)

James M. Levett, MD (STS); Stephen J. Lahey, MD (AATS)

The RUC identified services with a negative IWPUT and Medicare utilization over 10,000 for all services or over 1,000 for Harvard valued and CMS/Other source codes. The RUC recommended that these services be surveyed for April 2018.

33020 Pericardiotomy for removal of clot or foreign body (primary procedure)

The RUC reviewed the survey results from 54 cardiothoracic surgeons and determined that the survey 25th percentile work RVU of 14.31 appropriately accounts for the physician work required to perform this service. The RUC recommends 30 minutes of pre-evaluation time, 10 minutes of positioning, 15 minutes of scrub/dress/wait, 60 minutes intra-service time, 30 minutes immediate post-operative time, 1-99231, 1-99232, 1-99233 subsequent hospital visits, 1-99238 discharge day management and 1-99213 office visit. The RUC agreed that a level 3 subsequent hospital care visit is necessary (99233) as the surgeon is typically following the patient in intermediate care and will care for the patient, monitoring hemodynamics before he/she goes to the internist. The RUC also acknowledged that the previous visit data was from the Harvard studies, which included critical care visits and five and half (5.5) 99231 hospital visits, which no longer represents current practice. . Based on the survey respondents and specialty society input the RUC believes the post-operative visits now represent current practice for this 090-day global period service.

The typical patient that requires this intervention is someone who is acutely ill and has typically encountered some type of trauma resulting in the need for intensive short-term care prior to and immediately following the procedure. While these patients typically do not rise to the level of critical care, they usually tend to present from a trauma such as car accident, knife, cardiac catheter lab perforation or other type of injury which results in a higher intensity associated with the procedure than other similar procedures. The RUC compared the survey code to key reference service 35860 *Exploration for postoperative hemorrhage, thrombosis or infection; extremity* (work RVU = 15.25 and 60 minutes intra-service time) and noted that respondents indicated that the surveyed code is more intense and complex for all measures except the physical effort required. The recommended work RVU places these services in the appropriate relativity based on intensity. The RUC also compared the surveyed code to the second key reference service, CPT code 33202 *Insertion of epicardial electrode(s); open incision (eg, thoracotomy, median sternotomy, subxiphoid approach)* (work RVU = 13.20 and 65 minutes intra-service time). The intensity and complexity measures compared to CPT code 33202, which is also an open-heart procedure, are identical or more intense/complex for the survey code. CPT code 33202 is an open cardiac procedure that does not require intervention into the heart. The survey code has a slightly lower intra-service time, but a slightly higher total time and a higher intensity related to the mental effort and judgement and psychological stress. The RUC agreed that the increased intensity over both of the key reference codes was appropriate for this procedure and that this increased intensity supported the 25th percentile work RVU for this service. **The RUC recommends a work RVU of 14.31 for CPT code 33020.**

33025 Creation of pericardial window or partial resection for drainage

The RUC reviewed the survey results from 60 cardiothoracic surgeons and determined that the survey 25th percentile work RVU of 13.20 appropriately accounts for the work required to perform this service. The RUC recommends 50 minutes of pre-evaluation time, 10 minutes of positioning, 15 minutes of scrub/dress/wait, 60 minutes intra-service time, 30 minutes immediate post-operative time, 1-99231, 1-99233 subsequent hospital visits, 1-99238 discharge day management and 1-99213 office visit. The RUC agreed that additional pre-service evaluation time is warranted as indicated by the survey respondents, however the RUC determined the additional 20 minutes was excessive, and recommended 10 additional minutes pre-evaluation time above pre-time package 4 *Difficult Patient/Difficult Procedure*, totaling 50 minutes. This additional evaluation time accounts for the time the physician is reviewing imaging, obtaining consent, reviewing and explaining the procedure to the patient and discussing and coordinating with multiple other clinical services, such as infectious disease, oncology and pathology prior to surgery. The RUC agreed that on the discharge day management visit is required as the physician typically works with oncology and will be heavily involved in the care of this patient after surgery. The RUC also acknowledged that the previous visit data was from the Harvard studies, which included critical care visits and four and half (4.5) 99231 hospital visits, which no longer represents current practice. Based on the

survey respondents and specialty society input the RUC believes the post-operative visits now represent current practice for this 090-day global period service.

The RUC compared the surveyed code to the key reference service 32651 *Thoracoscopy, surgical; with partial pulmonary decortication* (work RVU = 18.78 and 70 minutes intra-service time) and determined that the surveyed code requires less physician work and time to complete and therefore is valued appropriately. The RUC also compared the surveyed code to the second key reference service, CPT code 33202 *Insertion of epicardial electrode(s); open incision (eg, thoracotomy, median sternotomy, subxiphoid approach)* (work RVU = 13.20 and 65 minutes intra-service time) and determined these services require the same amount of physician work and total time and should be valued the same. The RUC agreed that the surveyed code is slightly more intense as it not only includes the drainage of the pericardial fluid, but also a large resection of the pericardial specimen for pathologic examination and diagnosis. For additional support the RUC referenced similar service 67039 *Vitreotomy, mechanical, pars plana approach; with focal endolaser photocoagulation* (work RVU = 13.20 and 60 minutes intra-service time), which requires the same physician work and intra-service time to perform. **The RUC recommends a work RVU of 13.20 for CPT code 33025.**

Practice Expense

The PE Subcommittee removed 1 minute of clinical staff time for clinical activity, *complete pre-procedure phone calls and prescription* (CA005) for CPT code 33020 to account for two phone calls in the pre-service period. CPT code 33025 includes the standard 090-day pre-service time package. The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.

Work Neutrality

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

Referral to CPT

The specialty societies agreed that, as with other cardiac procedures, CPT code 32551 *Tube thoracostomy, includes connection to drainage system (eg, water seal), when performed, open (separate procedure)* would be considered integral to the pericardiectomy procedures and should not be reported separately, even though chest tubes are not typically used for these procedures. The societies are in support of adding a parenthetical note under the pericardiectomy CPT codes 32020 and 33025, that an insertion of a chest tube (32551) should not be separately reported when performed in the same session as a pericardiectomy procedure (33020, 33025) when it is placed in the ipsilateral side. There are circumstances when a patient has a right side pleural effusion in addition to the pericardial procedure, which is accessed through the central or left chest. If a chest tube is placed in the right chest for a pleural effusion, this would be different work and the chest tube insertion would be performed through a different incision on the contralateral side. **The RUC refers this issue to the CPT Editorial Panel to add a parenthetical.**

Transcatheter Aortic Valve Replacement (TAVR) (Tab 11)

Richard Wright, MD; James Levett, MD; Stephen Lahey, MD; Marie-France Poulin, MD; Thad Waites, MD; ACC, STS, SCAI, AATS

In 2005, the RUC began the process of flagging services that represent new technology or new services as they were presented to the Committee. In October 2016, the Relativity Assessment Workgroup reviewed codes that were flagged October 2011 – April 2012, with 3 years of available Medicare claims data (2013, 2014 and preliminary 2015 data). The Workgroup determined that the technology for these transcatheter aortic valve replacement (TAVR) services is evolving, as 400 cardiology centers now provide these services and have shifted from being provided in academic centers to now private centers. The RUC

recommended that CPT codes 33361-33366 be resurveyed for physician work and practice expense. The RUC did not believe there would be a change in physician work or practice expense for the add-on services and recommends that CPT codes 33367, 33368 and 33369 be removed from the new technology list as there is no demonstrated diffusion.

At the October 2017 RUC meeting, the specialty societies requested that this item be tabled and sent to the Research Subcommittee to develop a methodology that can be used to help value this unique set of codes which mandates the participation of two physicians and modifier 62 for the procedure. The specialties outlined their concerns with valuing these codes using the current methodology during the discussion with the pre-facilitation committee and the RUC. These are currently the only codes in the fee schedule where the -62 co-surgeon modifier is required 100 percent of the time. As each co-surgeon receives 62.5% of the work value and also each of them is performing the service and post-operative visit concurrently, the specialties noted this requirement has a direct impact on accurate valuation and interpretation of code components (various types of work per unit time; time spent by each provider) which makes valuing them difficult. Furthermore, the specialties noted that the Research Subcommittee and the RUC had previously approved the TVT registry as an extant data source and it was unclear to them how specifically these data points would be used in conjunction with the RUC survey data.

The RUC agreed to take no action on these codes at the October 2017 meeting and table their review until the April 2018 RUC meeting to provide the specialties and the Research Subcommittee sufficient time to resolve these methodologic issues. During the RUC's other business discussion, the RUC agreed that specialties should provide both median and mean for extant data sources as these summary data would provide the RUC with a more complete picture of central tendency. Providing both median and mean would provide information as to whether the dataset is negatively or positively skewed and to what degree.

Prior to the January 2018 RUC meeting, the specialty societies submitted a letter with a series of questions to be discussed by the Research Subcommittee. At the January 2018 Research Subcommittee meeting, the Subcommittee had a discussion with presenters from the Society of Thoracic Surgeons (STS), American College of Cardiology (ACC), American Association for Thoracic Surgery (AATS) and the Society for Cardiovascular Angiography and Interventions (SCAI) addressing their questions.

The Research Subcommittee made the Following Recommendations/Decisions at the January 2018 meeting:

- The Research Subcommittee did not approve any modification to the survey instrument or the survey data to simulate the payment adjustment created by the 62 co-surgeon modifier. The Subcommittee did note that after following the standard RUC survey process the specialty societies may provide additional rationale to support their recommendation.
- The Research Subcommittee recommends the RUC continue to require a RUC survey and presentation of survey data from RUC-approved extant databases. The Subcommittee noted that data from the RUC-approved extant database may be used to support the advisory committees' recommendation.
- The Research Subcommittee recommends the RUC continue requiring both the mean and the median physician times from RUC-approved extant databases. The Subcommittee noted that the specialty societies may provide rationale on why one value is preferable to another on a case-by-case basis. The Subcommittee clarified that it is not within their purview to indicate how the RUC will use these data.

000-day Global Major Surgical Procedures

Although the six TAVR procedures have a 000-day global, the procedure is considered a major cardiac procedure where the patients will typically stay in the hospital for 3 – 6 days (per data from the STS/ACC TVT Registry). As with other major surgical procedures that have a 000-day global (include several ECMO codes (starting at CPT code 33951) and thoracoscopy codes (starting at CPT code 32601)), the multispecialty team care of the patient will vary significantly by patient and institution and the 000-day global allows for appropriate care from multiple specialties without overlap in physician work or payment. All six of the codes in this family typically require a same-day post-procedure critical care visit.

Same Day Post-Procedure Visit for CPT codes 33361-33366

The initial postoperative course following TAVR is similar to other postoperative cardiac surgery procedures involving a heart valve. Post-operative care involves monitoring of the patient's hemodynamic condition, including cardiac rhythm, rate and conduction abnormalities. Cardiac arrhythmias are assessed. Atrial extrasystoles, either isolated or in prolonged runs, are differentiated from ventricular extrasystoles or runs which are correlated with operative events and hemodynamic effects; antiarrhythmic therapy (treatment or prophylaxis) is considered. The 12-lead EKG is evaluated for signs of ischemia or injury and compared to the preoperative tracing. Blood pressure, central venous pressure, pulmonary artery pressures, and cardiac output and index are assessed as appropriate based on monitoring lines that are utilized for each patient. Filling pressures (central venous pressure, pulmonary artery diastolic pressure and left atrial ("wedge" pressure) are correlated at baseline and waveforms are assessed. Crystalloid fluids or blood products are administered depending on cardiac index, mixed venous oxygen saturation, hemoglobin, and central filling pressures. Inotropic and vasoactive agents given by continuous infusion are adjusted to optimize oxygen delivery and minimize adverse end-organ effects. Peripheral perfusion, with special emphasis on end-organ perfusion, is carefully evaluated by observation and physical exam, correlating findings with invasive monitoring results. Any TAVR performed via a peripheral artery access (CPT codes 33361, 33362, 33363 and 33364) will necessitate a detailed assessment of distal arterial perfusion and vascular integrity of the artery. In addition, the vascular access wounds associated with CPT codes 33361, 33362, 33363 and 33364 will be assessed as part of standard wound care. The median sternotomy wound associated with CPT code 33365 will be evaluated for abnormal drainage, sternal instability, etc. Chest tubes placed prior to closure of the sternotomy wound will be assessed for excessive blood loss and air leaks. Post procedure chest x-ray is reviewed for post-operative pneumothorax. Similarly, the thoracotomy wound associated with CPT code 33366 is assessed for stability of the chest wall, abnormal drainage, etc. Chest tubes placed prior to closure of the thoracotomy wound are assessed for excessive blood loss and air leaks. Post procedure chest x-ray is reviewed for post-operative pneumothorax. The critical care visit covers the time that both physicians independently spend with the patient directly related to the procedure providing critical care services the same day after the procedure. The services provided do not overlap and are not duplicative with each physician managing and evaluating the patient from different post-operative perspectives.

33361 Transcatheter aortic valve replacement (TAVR/TAVI) with prosthetic valve; percutaneous femoral artery approach

The RUC reviewed the survey results from 36 co-surgeon teams (one interventional cardiologist and one cardiac surgeon each) completing for their concurrent times. The custom survey instrument, which had been approved by the Research Subcommittee, specifically instructed the survey respondents to "estimate the time and work involved in performing these procedures as a team, not as two individuals working separately." The RUC recommends the following concurrent physician times: pre-service evaluation of 50 minutes, pre-service positioning of 15 minutes, pre-service scrub/dress/wait of 20 minutes, intra-service time of 90 minutes, 30 minutes of immediate post-service time and one 99291 post-operative critical care visit on the day of the procedure. The RUC referenced the median TVT intra-service time was 92 minutes, noting the similarity to the median survey time, although the survey had been completed more recently than date range sourced from the registry. For the immediate post-service time, the

specialty societies are applying a reduction of 3 minutes from the standard package time for a total of 30 minutes as supported by the survey. The RUC agreed with the specialty that this was appropriate since this procedure includes a percutaneous approach, which does not require the same post procedure wound management necessary for the other procedures with open approaches.

The RUC reviewed the survey 25th percentile work RVU of 25.00 and agreed that this value somewhat overstates the amount of physician work involved. To determine an appropriate work RVU, the RUC, Research Subcommittee and presenting specialties exhaustively explored several potential methods spanning three RUC meetings (October 2017, January 2018 and April 2018) to come to an appropriate valuation and were unable to find an appropriate direct crosswalk to an individual code (including when the search was expanded to 010-day and 090-day services) due to a very limited number of comparable codes. To arrive at an appropriate valuation, the specialty societies proposed and the RUC agreed to add the time and value of a critical care visit to another 000-day code which describes a major cardiothoracic procedure. The RUC reviewed CPT codes 93591 *Percutaneous transcatheter closure of paravalvular leak; initial occlusion device, aortic valve* (work RVU=17.97, intra-service time of 90 minutes, total time of 208 minutes) and 99291 *Critical care, evaluation and management of the critically ill or critically injured patient; first 30-74 minutes* (work RVU= 4.50, total time of 70 minutes), which aggregate to form a potential crosswalk value of 22.47 work RVUs and would represent a total time of 278 minutes. The RUC compared the survey code to the 93591/99291 pairing, and agreed that a value of 22.47 would also be appropriate for the survey code. CPT code 93591 is also a 000-day major surgical procedure performed by interventional cardiology using a percutaneous approach and adding one critical care visit would bridge the gap between directly comparing these two services. Therefore, the RUC recommends a direct work RVU crosswalk from CPT code 33361 to the pairing of 93591 and 99291 (22.47 work RVUs). The RUC also reviewed CPT codes 93580 *Percutaneous transcatheter closure of congenital interatrial communication (ie, Fontan fenestration, atrial septal defect) with implant* (work RVU= 17.97, intra-service time of 120 minutes and total time of 210) and 99291 *Critical care, evaluation and management of the critically ill or critically injured patient; first 30-74 minutes* (work RVU= 4.50, total time of 70 minutes), which also aggregate to form 22.47 work RVUs and would support a similar valuation for the survey code. When accounting for the application of the -62 co-surgeon modifier, the adjusted IWP/PT for an individual physician would be 0.081 which is lower than the IWP/PT of the key reference codes selected by the survey respondents. **The RUC recommends a work RVU of 22.47 for CPT code 33361.**

33362 Transcatheter aortic valve replacement (TAVR/TAVI) with prosthetic valve; open femoral artery approach

The RUC reviewed the survey results from 35 co-surgeon teams (one interventional cardiologist and one cardiac surgeon each) completing for their concurrent times. The custom survey instrument, which had been approved by the Research Subcommittee, specifically instructed the survey respondents to “estimate the time and work involved in performing these procedures as a team, not as two individuals working separately.” The RUC recommends the following concurrent physician times: pre-service evaluation of 50 minutes, pre-service positioning of 15 minutes, pre-service scrub/dress/wait of 20 minutes, intra-service time of 103 minutes, 45 minutes of immediate post-service time and one 99291 post-operative critical care visit on the day of the procedure. The RUC compared the median survey time of 90 minutes and the median TVT intra-service time was 103 minutes, and agreed that assigning identical intra-service times for CPT codes 33361 and 33362 (of 90 minutes) would create a rank-order anomaly since an open approach entails more time and work relative to a percutaneous approach. Therefore, for this service, the RUC agreed that using the median registry skin-to-skin time of 103 minutes would be more appropriate. The RUC agreed with the specialty that an immediate post-service time of 45 minutes is appropriate since this procedure includes an open approach, which requires additional post procedure wound management necessary relative to CPT code 33361, which involves a percutaneous approach.

The RUC reviewed the survey 25th percentile work RVU of 28.00 and agreed that this value somewhat overstates the amount of physician work involved. To determine an appropriate work RVU, the RUC, Research Subcommittee and presenting specialty societies exhaustively explored several potential methods spanning three RUC meetings (October 2017, January 2018 and April 2018) to come to an appropriate valuation and were unable to find an appropriate direct crosswalk to an individual code (including when the search was expanded to 010-day and 090-day services) due to a very limited number of comparable codes. To arrive at an appropriate valuation, the specialties proposed and the RUC agreed to add the time and value of a critical care visit and an open approach code to another 000-day code which describes a major cardiothoracic procedure. The RUC agreed that the same foundational crosswalk of CPT code 93591 should be used for all six TAVR codes to maintain appropriate relativity. In addition, as the addition of the approach code would only represent the work differential between performing an open approach of the femoral artery versus a percutaneous approach of the femoral artery, the RUC agreed that a 50 percent reduction should be applied to the proxy approach code, even though the 50 percent payment reduction does not apply to add-on codes (e.g. -51 modifier reduction). The RUC reviewed CPT codes 93591 *Percutaneous transcatheter closure of paravalvular leak; initial occlusion device, aortic valve* (work RVU=17.97, intra-service time of 90 minutes, total time of 208 minutes), one half of open femoral artery approach code 34812 *Open femoral artery exposure for delivery of endovascular prosthesis, by groin incision, unilateral (List separately in addition to code for primary procedure)* (work RVU= 2.07 (50% of 4.13), intra-service time of 20 minutes (50% of 40)) and 99291 *Critical care, evaluation and management of the critically ill or critically injured patient; first 30-74 minutes* (work RVU= 4.50, total time of 70 minutes) ($17.97 + 2.07 + 4.50 = 24.54$), which aggregate to form a potential crosswalk value of 24.54 work RVUs and would represent a total time of 298 minutes. The RUC compared the survey code to the 93591/99291/half of 34812 grouping, and agreed that a value of 24.54 would also be appropriate for the survey code. CPT code 93591 is also a 000-day major surgical procedure performed by interventional cardiology – including 50 percent of the value of the code describing an open approach of the femoral artery and adding one critical care visit would bridge the gap between directly comparing these two services. Therefore, the RUC recommends a direct work RVU crosswalk from CPT code 33361 to the grouping of 93591, one half of 34812 and 99291 (24.54 work RVUs). When accounting for the application of the -62 co-surgeon modifier, the adjusted IWPUR for an individual physician would be 0.080 which is lower than the IWPUR of the key reference codes selected by the survey respondents. **The RUC recommends a work RVU of 24.54 for CPT code 33362.**

33363 Transcatheter aortic valve replacement (TAVR/TAVI) with prosthetic valve; open axillary artery approach

The RUC reviewed the survey results from 31 co-surgeon teams (one interventional cardiologist and one cardiac surgeon each) completing for their concurrent times. The custom survey instrument, which had been approved by the Research Subcommittee, specifically instructed the survey respondents to “estimate the time and work involved in performing these procedures as a team, not as two individuals working separately.” The RUC recommends the following concurrent physician times: pre-service evaluation of 50 minutes, pre-service positioning of 15 minutes, pre-service scrub/dress/wait of 20 minutes, intra-service time of 100 minutes, 45 minutes of immediate post-service time and one 99291 post-operative critical care visit on the day of the procedure. The specialty societies noted that this rarely performed service did not have enough utilization in the TVT registry to reach the 95 percent confidence interval necessary for the time data to be considered representative; therefore, the intra-service time for this service was not referenced. The RUC agreed with the specialty that an immediate post-service time of 45 minutes is appropriate since this procedure includes an open approach, which requires additional post procedure wound management necessary relative to CPT code 33361 which involves a percutaneous approach.

The RUC reviewed the survey 25th percentile work RVU of 28.25 and agreed that this value somewhat overstates the amount of physician work involved. To determine an appropriate work RVU, the RUC,

Research Subcommittee and presenting specialty societies exhaustively explored several potential methods spanning three RUC meetings (October 2017, January 2018 and April 2018) to come to an appropriate valuation and were unable to find an appropriate direct crosswalk to an individual code (including when the search was expanded to 010-day and 090-day services) due to a very limited number of comparable codes. To arrive at an appropriate valuation, the specialties proposed and the RUC agreed to add the time and value of a critical care visit and an open approach code to another 000-day code which describes a major cardiothoracic procedure. The RUC agreed that the same foundational crosswalk of CPT code 93591 should be used for all six TAVR codes to maintain appropriate relativity. In addition, as the addition of the approach code would only represent the work differential between performing using an open axillary artery approach versus a percutaneous approach of the femoral artery for CPT code 33361, the RUC agreed that a 50 percent reduction should be applied to the proxy approach code, even though the 50 percent payment reduction does not apply to add-on codes (e.g. -51 modifier reduction). The RUC reviewed CPT codes 93591 *Percutaneous transcatheter closure of paravalvular leak; initial occlusion device, aortic valve* (work RVU=17.97, intra-service time of 90 minutes, total time of 208 minutes), one half of open axillary artery approach code 34715 *Open axillary/subclavian artery exposure for delivery of endovascular prosthesis by infraclavicular or supraclavicular incision, unilateral (List separately in addition to code for primary procedure)* (work RVU= 3.00 (50% of 6.00), intra-service time of 30 minutes (50% of 60)) and 99291 *Critical care, evaluation and management of the critically ill or critically injured patient; first 30-74 minutes* (work RVU= 4.50, total time of 70 minutes), (17.97 + 3.00 + 4.50 = 25.47), which aggregate to form a potential crosswalk value of 25.47 work RVUs and would represent a total time of 308 minutes. The RUC compared the survey code to the 93591/99291/half of 34715 grouping, and agreed that a value of 25.47 would also be appropriate for the survey code. CPT code 93591 is also a 000-day major surgical procedure performed by interventional cardiology – including 50 percent of the value of the code describing an open approach of the axillary artery and adding one critical care visit would bridge the gap between directly comparing these two services. Therefore, the RUC recommends a direct work RVU crosswalk from CPT code 33361 to the grouping of 93591, one half of 34715 and 99291 (25.47 work RVUs). When accounting for the application of the -62 co-surgeon modifier, the adjusted IWPUR for an individual physician would be 0.088 which is lower than the IWPUR of the key reference codes selected by the survey respondents. **The RUC recommends a work RVU of 25.47 for CPT code 33363.**

33364 Transcatheter aortic valve replacement (TAVR/TAVI) with prosthetic valve; open iliac artery approach

The RUC reviewed the survey results from 28 co-surgeon teams (one interventional cardiologist and one cardiac surgeon each) completing for their concurrent times. CPT code 33364 did not reach 30 survey responses and will be re-reviewed in three years by the Relativity Assessment Workgroup. Specialty societies will submit an action plan indicating whether this service should either be resurveyed or referred to the CPT Editorial Panel for subsequent deletion or revision to a Category III code. The custom survey instrument, which had been approved by the Research Subcommittee, specifically instructed the survey respondents to “estimate the time and work involved in performing these procedures as a team, not as two individuals working separately.” The RUC recommends the following concurrent physician times: pre-service evaluation of 50 minutes, pre-service positioning of 15 minutes, pre-service scrub/dress/wait of 20 minutes, intra-service time of 94 minutes, 45 minutes of immediate post-service time and one 99291 post-operative critical care visit on the day of the procedure. The specialty noted that this rarely performed service did not have enough utilization in the TVT registry to reach the 95 percent confidence interval necessary for the time data to be considered representative; therefore, the intra-service time for this service was not referenced. The RUC agreed with the specialty societies that an immediate post-service time of 45 minutes is appropriate since this procedure includes an open approach, which requires additional post procedure wound management necessary relative to CPT code 33361 which involves a percutaneous approach.

The RUC reviewed the survey 25th percentile work RVU of 28.75 and agreed that this value somewhat overstates the amount of physician work involved. To determine an appropriate work RVU, the RUC, Research Subcommittee and presenting specialties exhaustively explored several potential methods spanning three RUC meetings (October 2017, January 2018 and April 2018) to come to an appropriate valuation and were unable to find an appropriate direct crosswalk to an individual code (including when the search was expanded to 010-day and 090-day services) due to a very limited number of comparable codes. To arrive at an appropriate valuation, the specialties proposed and the RUC agreed to add the time and value of a critical care visit and an open approach code to another 000-day code which describes a major cardiothoracic procedure. The RUC agreed that the same foundational crosswalk to CPT code 93591 should be used for all six TAVR codes to maintain appropriate relativity. In addition, as the addition of the approach code would only represent the work differential between performing using an open iliac artery approach versus a percutaneous approach of the femoral artery for CPT code 33361, the RUC agreed that a 50 percent reduction should be applied to the proxy approach code, even though the 50 percent payment reduction does not apply to add-on codes (e.g. -51 modifier reduction). The RUC reviewed CPT codes 93591 *Percutaneous transcatheter closure of paravalvular leak; initial occlusion device, aortic valve* (work RVU=17.97, intra-service time of 90 minutes, total time of 208 minutes), one half of open iliac artery approach code 34820 *Open iliac artery exposure for delivery of endovascular prosthesis or iliac occlusion during endovascular therapy, by abdominal or retroperitoneal incision, unilateral (List separately in addition to code for primary procedure)* (work RVU= 3.50 (50% of 7.00), intra-service time of 30 minutes (50% of 60)) and 99291 *Critical care, evaluation and management of the critically ill or critically injured patient; first 30-74 minutes* (work RVU= 4.50, total time of 70 minutes) ($17.97 + 3.50 + 4.50 = 25.97$), which aggregate to form a potential crosswalk value of 25.97 work RVUs and would represent a total time of 308 minutes. The RUC compared the survey code to the 93591/99291/half of 34820 grouping, and agreed that a value of 25.97 would also be appropriate for the survey code. CPT code 93591 is also 000-day major surgical procedure performed by interventional cardiology – including 50 percent of the value of the code describing an open approach of the iliac artery and adding one critical care visit would bridge the gap between directly comparing these two services. Therefore, the RUC recommends a direct work RVU crosswalk from CPT code 33361 to the grouping of 93591, one half of 34820 and 99291 (25.97 work RVUs). When accounting for the application of the -62 co-surgeon modifier, the adjusted IWPUR for an individual physician would be 0.097 which is lower than the IWPUR of the key reference codes selected by the survey respondents. **The RUC recommends a work RVU of 25.97 for CPT code 33364.**

33365 Transcatheter aortic valve replacement (TAVR/TAVI) with prosthetic valve; transaortic approach (eg, median sternotomy, mediastinotomy)

The RUC reviewed the survey results from 31 co-surgeon teams (one interventional cardiologist and one cardiac surgeon each) completing for their concurrent times. The custom survey instrument, which had been approved by the Research Subcommittee, specifically instructed the survey respondents to “estimate the time and work involved in performing these procedures as a team, not as two individuals working separately.” The RUC recommends the following concurrent physician times: pre-service evaluation of 50 minutes, pre-service positioning of 15 minutes, pre-service scrub/dress/wait of 20 minutes, intra-service time of 120 minutes, 45 minutes of immediate post-service time and one 99291 post-operative critical care visit on the day of the procedure. The specialty noted that this rarely performed service did not have enough utilization in the TVT registry to reach the 95 percent confidence interval necessary for the time data to be considered representative; therefore, the intra-service time for this service was not referenced. The RUC agreed with the specialty that an immediate post-service time of 45 minutes is appropriate since this procedure includes an open approach, which requires additional post procedure wound management necessary relative to CPT code 33361 which involves a percutaneous approach.

The RUC reviewed the survey 25th percentile work RVU of 34.00 and agreed that this value somewhat overstates the amount of physician work involved. To determine an appropriate work RVU, the RUC,

Research Subcommittee and presenting specialties exhaustively explored several potential methods spanning three RUC meetings (October 2017, January 2018 and April 2018) to come to an appropriate valuation and were unable to find an appropriate direct crosswalk to an individual code (including when the search was expanded to 010-day and 090-day services) due to a very limited number of comparable codes. To arrive at an appropriate valuation for the open approach TAVR services, the specialties proposed and the RUC agreed to add the time and value of a critical care visit and an open approach code to another 000-day code which describes a major cardiothoracic procedure. However, there is no transaortic approach code to use as a proxy for the valuation of CPT code 33365, so the RUC reviewed the existing value differential between CPT codes 33366 and 33365 of 2.76 work RVUs. The RUC deducted this amount from its recommended work RVU for code 33366 to arrive at a work RVU of 26.59 (29.35 minus 2.76). The RUC noted that this value would have appropriate rank order with its other recommended work RVUs. When accounting for the application of the -62 co-surgeon modifier, the adjusted IWP/UT for an individual physician would be 0.079 which is lower than the IWP/UT of the key reference codes selected by the survey respondents. **The RUC recommends a work RVU of 26.59 for CPT code 33365.**

33366 Transcatheter aortic valve replacement (TAVR/TAVI) with prosthetic valve; transapical exposure (eg, left thoracotomy)

The RUC reviewed the survey results from 31 co-surgeon teams (one interventional cardiologist and one cardiac surgeon each) completing for their concurrent times. The custom survey instrument, which had been approved by the Research Subcommittee, specifically instructed the survey respondents to “estimate the time and work involved in performing these procedures as a team, not as two individuals working separately.” The RUC recommends the following concurrent physician times: pre-service evaluation of 50 minutes, pre-service positioning of 15 minutes, pre-service scrub/dress/wait of 20 minutes, intra-service time of 120 minutes, 45 minutes of immediate post-service time and one 99291 post-operative critical care visit on the day of the procedure. The specialty noted that this rarely performed service did not have enough utilization in the TVT registry to reach the 95 percent confidence interval necessary for the time data to be considered representative; therefore, the intra-service time for this service was not referenced. The RUC agreed with the specialty that an immediate post-service time of 45 minutes is appropriate since this procedure includes an open approach, which requires additional post procedure wound management necessary relative to 33361 which involves a percutaneous approach.

The RUC reviewed the survey 25th percentile work RVU of 34.50 and agreed that this value somewhat overstates the amount of physician work involved. To determine an appropriate work RVU, the RUC, Research Subcommittee and presenting specialties exhaustively explored several potential methods spanning three RUC meetings (October 2017, January 2018 and April 2018) to come to an appropriate valuation and were unable to find an appropriate direct crosswalk to an individual code (including when the search was expanded to 010-day and 090-day services) due to a very limited number of comparable codes. In order to arrive at an appropriate valuation, the specialties proposed and the RUC agreed to add the time and value of a critical care visit and an open approach code to another 000-day code which describes a major cardiothoracic procedure. The RUC agreed that the same foundational crosswalk to CPT code 93591 should be used for all six TAVR codes to maintain appropriate relativity. The RUC reviewed CPT codes 93591 *Percutaneous transcatheter closure of paravalvular leak; initial occlusion device, aortic valve* (work RVU=17.97, intra-service time of 90 minutes, total time of 208 minutes), one half of thoracotomy exposure code 32100 *Thoracotomy; with exploration* (work RVU= 6.88 (50% of 13.75 as -51 modifier would apply to this service)) and 99291 *Critical care, evaluation and management of the critically ill or critically injured patient; first 30-74 minutes* (work RVU= 4.50, total time of 70 minutes) (17.97 + 6.88 + 4.50 = 29.35), which aggregate to form a potential crosswalk value of 29.35 work RVUs. The RUC compared the survey code to the 93591/99291/half of 32100 grouping, and agreed that a value of 29.35 would also be appropriate for the survey code. CPT code 93591 is also a 000-day major surgical procedure performed by interventional cardiology – including 50 percent of the value of

the code describing a thoracotomy and adding one critical care visit would bridge the gap between directly comparing these two services. Therefore, the RUC recommends a direct work RVU crosswalk from CPT code 33366 to the grouping of CPT code 93591, one half of 34200 and 99291 (29.35 work RVUs). When accounting for the application of the -62 co-surgeon modifier, the adjusted IWPUR for an individual physician would be 0.093 which is lower than the IWPUR of the key reference codes selected by the survey respondents. **The RUC recommends a work RVU of 29.35 for CPT code 33366.**

Practice Expense

The RUC recommends the direct practice expense inputs as approved 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.

New Technology

CPT codes 33361, 33362, 33363, 33364, 33365 and 33366 will remain on the New Technology list and be re-reviewed by the RUC in three years to ensure correct valuation and utilization assumptions.

RAW Flag for Service with Less than 30 Survey Responses

CPT code 33364 did not reach 30 survey responses and will be re-reviewed in three years by the Relativity Assessment Workgroup. Specialty societies will submit an action plan indicating whether this service should either be resurveyed or referred to the CPT Editorial Panel for subsequent deletion or revision to a Category III code.

Do Not Use to Validate for Physician Work

The RUC agreed that CPT codes 33361-33366 should continue to be labeled in the RUC database with a flag that they should not be used to validate physician work. These unique services which are required to be performed by co-surgeons were valued using an unconventional methodology which would not be appropriate to compare the relativity for other codes.

Stab Phlebectomy of Varicose Veins (Tab 12)

Matthew Sideman, MD (SVS); Fran Aiello, MD (SVS); Curtis Anderson, MD (SIR); Charles Mabry, MD (ACS); Nadar Massarweh, MD, MPH (ACS); John Blebea, MD (ACPh)

CPT codes 37765 and 37766 were identified in February 2008 via the High Volume Growth screen, for services with a total Medicare utilization of 1,000 or more that have increased by at least 100% from 2004 through 2006. The RUC recommended monitoring and reviewing changes in utilization over multiple years. In October 2017, the RUC recommended that this service be surveyed for April 2018.

The specialty societies indicated that that these services have migrated from the facility outpatient setting to the office setting and the specialties do not consider them major procedures that would require 90-days of follow-up care. Therefore, the specialty societies requested that CMS change the global period from a 090-day to a 010-day global period to more accurately reflect the current practice as well maintain consistency with similar minor surgery code families such as the lesion excision, destruction, and repair codes and incision and drainage codes that typically require one visit within 10 days to perform a wound check and remove sutures, when utilized. The specialties noted that the stab incisions performed for CPT codes 37765 and 37766 include absorbable sutures and/or medical glue, requiring a wound check at 7 to 10 days. CMS questioned if the physician will see these patients after 10 days for follow-up and the specialty societies confirmed that follow-up past 10 days is not typical.

37765 Stab phlebectomy of varicose veins, 1 extremity; 10-20 stab incisions

The RUC reviewed the survey results from 171 vascular surgeons, general surgeons, radiologists, and phlebologists and determined that the survey 25th percentile work RVU of 4.80 appropriately accounts for the work required to perform this service. The RUC recommends 21 minutes evaluation time, 4 minutes positioning, 10 minutes scrub/dress/wait time, 45 minutes intra-service time, 10 minutes immediate post-operative time and 1-99213 office visit. Based on the preliminary comments from the RUC members that the survey was robust and the 25th percentile work RVU demonstrated the appropriate work relative to other services, the specialty societies changed their original recommendation from crosswalk to CPT code 36561 *Insertion of tunneled centrally inserted central venous access device, with subcutaneous port; age 5 years or older* (work RVU = 5.79) to the survey 25th percentile. The RUC agreed that the decrease in work to the survey 25th percentile work RVU of 4.80 is appropriate given the change to the global period and decrease in intra-service time. The RUC noted that the decrease in intra-service time and the decrease in work RVU maintain essentially the same intraoperative intensity for this service which is an indication that intra-service work has not changed.

The RUC compared the surveyed code to key reference service 36561 *Insertion of tunneled centrally inserted central venous access device, with subcutaneous port; age 5 years or older* (work RVU = 5.79 and 45 minutes intra-service time) and noted that CPT code 36561 requires puncturing the subclavian/internal jugular vein, creating a distant subcutaneous pocket for a port device and tunneling a catheter from the anterior chest wall to the venotomy site and to the port device. Although this work requires a similar amount of time compared to the surveyed code, the physician work is more intense and complex when compared to 10-20 separate subcutaneous stab incisions for removal of incompetent veins in the lower extremity. Therefore, CPT code 37765 is appropriately valued lower and has a lower intensity than CPT code 36561. The RUC also compared the surveyed code to the second key reference service 49324 *Laparoscopy, surgical; with insertion of tunneled intraperitoneal catheter* (work RVU = 6.32 and 60 minutes of intra-service time) and determined that the surveyed code requires less physician work and time to perform and thus should be valued appropriately lower. For further support, the RUC referenced MPC code 13121 *Repair, complex, scalp, arms, and/or legs; 2.6 cm to 7.5 cm* (work RVU = 4.00 and 45 minutes intra-service time) and codes 11644 *Excision, malignant lesion including margins, face, ears, eyelids, nose, lips; excised diameter 3.1 to 4.0 cm* (work RVU = 4.34 and 45 minutes intra-service time) and 57023 *Incision and drainage of vaginal hematoma; non-obstetrical (eg, post-trauma, spontaneous bleeding)* (work RVU = 5.18 and 45 minutes intra-service time). **The RUC recommends a work RVU of 4.80 for CPT code 37765.**

37766 Stab phlebectomy of varicose veins, 1 extremity; more than 20 incisions

The RUC reviewed the survey results from 170 vascular surgeons, general surgeons, radiologists, and phlebologists and determined that the survey 25th percentile work RVU of 6.00 appropriately accounts for the work required to perform this service. The RUC recommends 21 minutes evaluation time, 4 minutes positioning, 10 minutes scrub/dress/wait time, 60 minutes intra-service time, 15 minutes immediate post-operative time and 1-99213 office visit. Based on the preliminary comments from the RUC members that the survey was robust and the 25th percentile work RVU demonstrated the appropriate work relative to other services, the specialty societies changed their recommendation from the survey median of 7.00 work RVUs to the survey 25th percentile. The RUC agreed that the decrease in work to the survey 25th percentile work RVU of 6.00 is appropriate given the change to the global period and decrease in intra-service time. The RUC noted that the decrease in intra-service time and the decrease in work RVU maintain essentially the same intraoperative intensity for this service which is an indication that intra-service work has not changed.

The RUC compared the surveyed code to the key reference services 50593 *Ablation, renal tumor(s), unilateral, percutaneous, cryotherapy* (work RVU = 8.88 and 90 minutes intra-service time) and 38510 *Biopsy or excision of lymph node(s); open, deep cervical node(s)* (work RVU = 6.74 and 45 minutes of

intra-service time), noting that these services were not good comparators relative to the physician work, time, intensity and complexity required for CPT code 37766. Therefore, the RUC referenced MPC code 64561 *Percutaneous implantation of neurostimulator electrode array; sacral nerve (transforaminal placement) including image guidance, if performed* (work RVU = 5.44 and 45 minutes intra-service time) noting that the surveyed service requires more physician work, intra-service time and is slightly more intense. Therefore, a slightly higher work RVU of 6.00 for CPT code 37766 is appropriate relative to CPT code 64561. The RUC noted that CPT code 37766 requires 15 minutes more intra-service time than 37765 and is slightly more intense, resulting in the appropriate rank order. **The RUC recommends a work RVU of 6.00 for CPT code 37766.**

Practice Expense

The PE Subcommittee made a minor correction to add 3 minutes for clinical activity, *Clean room/equipment by clinical staff* (CA024). The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.

Work Neutrality

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

Biopsy of Mouth Lesion (Tab 13)

James M. Startzell, DMD, MS (AAOMS); Lionel Candelaria, DDS (AAOMS); Peter Manes, MD (AAO-HNS); Jay Shah, MD (AAO-HNS); Lance Manning, MD (AAO-HNS)

Facilitation Committee #2

The RUC identified services with a negative IWPUT and Medicare utilization over 10,000 for all services or over 1,000 for Harvard valued and CMS/Other source codes. CPT code 40808 was identified via this screen for review.

Compelling Evidence

The RUC reviewed and accepted compelling evidence that the original valuation of CPT code 40808 *Biopsy, vestibule of mouth* was based on flawed methodology when it was reviewed in 1995 which resulted in the service having a negative IWPUT. The value of the service was maintained without taking into context the times newly assigned to the service in 1995.

40808 Biopsy, vestibule of mouth

The RUC reviewed the survey results from 112 physicians and agreed on the following physician time components: 7 minutes of pre-service evaluation, 1 minute of pre-service positioning, 5 minutes of pre-service scrub/dress/wait, 10 minutes of intra-service time, 7 minutes of immediate post-service time and one 99212 post-operative office visit. The RUC noted that although the intra-service time and total time both decreased relative to current, the current times and values result in a negative IWPUT, indicating that the current times and values are misaligned.

The RUC reviewed the survey 25th percentile work RVU of 1.40 and agreed that this value somewhat overstates the amount of physician work involved. To determine an appropriate work RVU, the RUC compared the survey code to MPC code 11440 *Excision, other benign lesion including margins, except skin tag (unless listed elsewhere), face, ears, eyelids, nose, lips, mucous membrane; excised diameter 0.5 cm or less* (work RVU= 1.05, pre-service time of 5 minutes, intra-service time of 10 minutes, post-service time of 5 minutes and one 99212 office visit) and noted that both services have identical intra-service time, involve an identical amount of physician work and both involve a level 2 post-operative office visit. Therefore, the RUC recommends a direct work RVU crosswalk from code 11440 to 40808. The Workgroup compared the survey code to reference codes 11400 *Excision, benign lesion including*

*margins, except skin tag (unless listed elsewhere), trunk, arms or legs; excised diameter 0.5 cm or less (work RVU= 0.90, intra-time of 10 minutes, total time of 36 minutes) and 10160 Puncture aspiration of abscess, hematoma, bulla, or cyst (work RVU= 1.25, intra-time of 10 minutes and total time of 61 minutes) and noted that these reference codes appropriately bracket the survey code in terms of total time and amount of physician work. **The RUC recommends a work RVU of 1.05 for CPT code 40808.***

Practice Expense

The PE Subcommittee removed 2 minutes of clinical staff time in the non-facility for clinical activity, *review examination with interpreting MD/DO (CA031)*, as it is generally only included for imaging services. The Subcommittee also adjusted the equipment time formulas to accurately account for the clinical staff time that should be included. The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.

Electronic Analysis of Implanted Pump (PE Only) (Tab 14)

Matthew Grierson, MD (AAPM&R); Marc Leib, MD (ASA); Richard Rosenquist, MD (ASA); Wesley Ibezado, MD (SIS)

In October 2017, the RUC identified that these services were originally surveyed by one specialty but are now performed by a different specialty. CPT code 62368 was not surveyed in 2011 but crosswalked directly to 62369 recommended by AAPM, AAPM&R, ASA, SIS and NASS. In January 2018, the RUC recommended it review the direct PE inputs only for this family of services in April 2018.

The RUC discussed that CPT codes 62367, 62368 and 62370 are typically performed with an Evaluation and Management (E/M) service and removed overlapping practice expense inputs for CPT code 62370. The equipment formulas were adjusted for CPT codes 62368 and 62370 to ensure that they are consistent with the default equipment formula.

The Practice Expense (PE) Subcommittee discussed that CPT code 62370 is for complex patients, such as patients with dense scar tissue that is difficult to puncture, or with an inverted pump that is difficult to access, requiring the skill of a physician. The CPT representative noted that the time and work RVU is higher for 62370 *Electronic analysis of programmable, implanted pump for intrathecal or epidural drug infusion (includes evaluation of reservoir status, alarm status, drug prescription status); with reprogramming and refill (requiring skill of a physician or other qualified health care professional)* (work RVU = 0.90, 20 minutes intra-service time) than for code 62369 *Electronic analysis of programmable, implanted pump for intrathecal or epidural drug infusion (includes evaluation of reservoir status, alarm status, drug prescription status); with reprogramming and refill* (work RVU = 0.67, 15 minutes intra-service time) and the utilization for 62370 is higher than for code 62369. The CPT representative indicated that the CPT language may need clarification to indicate that 62370 is not only based on who performs the service, but also on the complexity of the patient. **The RUC recommends the direct practice expense inputs as modified by the PE Subcommittee.**

X-Ray Exam – Sinuses (Tab 15)

Kurt Schoppe, MD (ACR); Daniel Wessell, MD (ACR); Thomas Kintanar, MD (AAFP); Mary Newman, MD (ACP); Tanvir Hussain, MD (ACP); Gregory Nicola, MD (ASNR); Melissa Chen, MD (ASNR)

In October 2017, the Relativity Assessment Workgroup requested that AMA staff compile a list of CMS/Other codes with Medicare utilization of 30,000 or more. In January 2018, the RUC recommended to crosswalk these services like other recent similar radiology recommendations for April 2018, if approved by the Research Subcommittee.

In February, the Research Subcommittee approved for the specialty societies to utilize a crosswalk methodology to establish physician work and physician time recommendations in lieu of conducting a RUC survey. The Research Subcommittee had reviewed the recommendation made by the specialty societies to crosswalk times and values for these identified codes to other codes performed by the specialty societies. On the Research Subcommittee conference call, the specialty societies explained that when determining an appropriate crosswalk, they tried to find RUC reviewed codes that were similar in service and time, performed on similar anatomical site, required similar number of views and required similar patient positions. The Research Subcommittee agreed that the methodology employed by the specialty was appropriate for these services, noting past precedent of the Research Subcommittee approving a similar request for X-ray codes in April 2017 and in 2010. As part of its discussion, the Subcommittee noted that it would not recommend for the specialty to propose using lower work RVU crosswalks to justify maintaining the value of higher work RVU codes.

The Research Subcommittee approved the crosswalk/reference code methodology as proposed by the specialty societies to be appropriate for codes 70210, 70220, 70250, 70260, 70360, 72170, 72190.

70210 Radiologic examination, sinuses, paranasal, less than 3 views

CPT code 70210 is an x-ray procedure to evaluate the degree and pattern of sinus opacification. The RUC reviewed the descriptions of work and the expert panel recommendations and agreed on the following physician time components: pre-service time of 1 minute, intra-service time of 3 minutes and post-service time of 1 minute.

The RUC agreed that the current work RVU 0.17 for CPT code 70210 should be maintained. The RUC compared the code under review to CPT code 74018 *Radiologic examination, abdomen; 1 view* (work RVU = 0.18, 1 minute pre-service time, 3 minutes intra-service time, 1 minute post-service time) and noted that both services should be valued similarly as both studies have identical intra-service and total times. Although the number of views varies with respect to the reference code, the RUC agreed that the magnitude of work is similar and the work RVUs are nearly identical. For additional support, the RUC compared CPT code 70210 to three other radiology codes: CPT code 73080 *Radiologic examination, elbow; complete, minimum of 3 views* (work RVU = 0.17, 1 minute pre-service time, 3 minutes intra-service time, 1 minute post-service time); 73610 *Radiologic examination, ankle; complete, minimum of 3 views* (work RVU = 0.17, 1 minute pre-service time, 3 minutes intra-service time, 1 minute post-service time) and 73630 *Radiologic examination, foot; complete, minimum of 3 views* (work RVU = 0.17, 1 minute pre-service time, 3 minutes intra-service time, 1 minute post-service time) and noted that the physician work and times are identical while acknowledging that these codes apply to the extremities unlike CPT code 70210 which is an axillary skeletal radiograph. **The RUC recommends a work RVU of 0.17 for CPT code 70210.**

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

CPT code 70220 is an x-ray procedure to primarily evaluate the degree and pattern of sinus opacification. The RUC reviewed the descriptions of work and the expert panel recommendations and agreed on the following physician time components: pre-service time of 1 minute, intra-service time of 5 minutes and post-service time of 1 minute.

The RUC agreed that the current work RVU of 0.25 for CPT code 70220 should be maintained. The RUC compared the code under review to CPT code 72081 *Radiologic examination, spine, entire thoracic and lumbar, including skull, cervical and sacral spine if performed (eg, scoliosis evaluation); one view* (work RVU = 0.26, 1 minute pre-service time, 5 minutes intra-service time, 1 minute post-service time) and noted that both services should be valued similarly as both studies have identical intra-service and total times. Although the number of views varies with respect to the reference code, the RUC agreed that the magnitude of work is similar and the work RVUs are nearly identical. For additional support, the

RUC compared CPT code 70220 to MPC code 93922 *Limited bilateral noninvasive physiologic studies of upper or lower extremity arteries, (eg, for lower extremity: ankle/brachial indices at distal posterior tibial and anterior tibial/dorsalis pedis arteries plus bidirectional, Doppler waveform recording and analysis at 1-2 levels, or ankle/brachial indices at distal posterior tibial and anterior tibial/dorsalis pedis arteries plus volume plethysmography at 1-2 levels, or ankle/brachial indices at distal posterior tibial and anterior tibial/dorsalis pedis arteries with, transcutaneous oxygen tension measurement at 1-2 levels)* (work RVU = 0.25, 3 minute pre-service time, 5 minutes intra-service time, 2 minutes post-service time) and noted that both services have identical intra-service time and involve the same amount of physician work. **The RUC recommends a work RVU of 0.25 for CPT code 70220.**

Practice Expense

The Practice Expense (PE) Subcommittee made minor adjustments to the equipment minutes. The RUC recommends the direct practice expense inputs as modified by the PE Subcommittee.

X-Ray Exam – Skull (Tab 16)

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

In October 2017, the Relativity Assessment Workgroup requested that AMA staff compile a list of CMS/Other codes with Medicare utilization of 30,000 or more. In January 2018, the RUC recommended to crosswalk these services like other recent similar radiology recommendations for April 2018, if approved by the Research Subcommittee.

In February, the Research Subcommittee approved for the specialties to utilize a crosswalk methodology to make physician work and physician time recommendations in lieu of conducting a RUC survey. The Research Subcommittee had reviewed the recommendation made by the specialty societies to crosswalk times and values for these identified codes to other codes performed by the specialty societies. On the Research Subcommittee conference call, the specialty societies explained that when determining an appropriate crosswalk, they tried to find RUC reviewed codes that were similar in service and time, performed on similar anatomical site, required similar number of views and required similar patient positions. The Research Subcommittee agreed that the methodology employed by the specialty was appropriate for these services, noting past precedent of the Research Subcommittee approving a similar request for X-ray codes in April 2017 and in 2010. As part of its discussion, the Subcommittee noted that it would not recommend for the specialty to propose using lower work RVU crosswalks to justify maintaining the value of higher work RVU codes.

The Research Subcommittee approved the crosswalk/reference code methodology as proposed by the specialty societies to be appropriate for codes 70210, 70220, 70250, 70260, 70360, 72170, 72190.

70250 Radiologic examination, skull; less than 4 views

CPT code 70250 is an x-ray procedure to evaluate the calvarium, skull base, facial bones and soft tissues. While also used to evaluate patients after trauma, the procedure is frequently used to assess for the presence of foreign bodies. The RUC reviewed the descriptions of work and the expert panel recommendations and agreed on the following physician time components: pre-service time of 1 minute, intra-service time of 4 minutes and post-service time of 1 minute.

To determine an appropriate work RVU, the RUC compared the code under review to the proposed crosswalk CPT code 74019 *Radiologic examination, abdomen; 2 views* (work RVU = 0.23, 1 minute pre-service time, 4 minutes intra-service time, 1 minute post-service time) and noted that both services have identical times and require the same physician work. The proposed crosswalk represents a reduction of 0.01 work RVUs from the current value of CPT code 70250 and a reduction of 1 minute intra-service

time. Although the number of views varies with respect to the crosswalk, the RUC agreed that the magnitude of work is similar. The RUC also compared CPT code 70250 to CPT code 73503 *Radiologic examination, hip, unilateral, with pelvis when performed; minimum of 4 views* (work RVU = 0.27, 1 minute pre-service time, 5 minutes intra-service time, 1 minute post-service time) and noted that the comparison code has slightly higher intra-service time with a *minimum* of four views and therefore CPT code 70250 should be valued lower than the reference service. Thus, the RUC recommends a direct crosswalk from CPT code 74019 to 70250. **The RUC recommends a work RVU of 0.23 for CPT code 70250.**

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

CPT code 70260 is an x-ray procedure to evaluate the calvarium, skull base, facial bones and soft tissues that adds additional complexity with additional views. The RUC reviewed the descriptions of work and the expert panel recommendations and agreed on the following physician time components: pre-service time of 1 minute, intra-service time of 5 minutes and post-service time of 1 minute.

To determine an appropriate work RVU, the RUC compared the code under review to the proposed crosswalk CPT code 74022 *Radiologic examination, abdomen; complete acute abdomen series, including supine, erect, and/or decubitus views, single view chest* (work RVU = 0.32, 1 minute pre-service time, 5 minutes intra-service time, 1 minute post-service time) and noted that both services have identical times and require the same amount of physician work. The proposed crosswalk represents a reduction of 0.02 work RVUs from the current value of CPT code 70260 and maintains relativity across the family of codes. For additional support, the RUC compared CPT code 70260 to two other radiology codes: CPT code 73130 *Radiologic examination, hand; minimum of 3 views* (work RVU = 0.17, 1 minute pre-service time, 5 minutes intra-service time, 1 minute post-service time) and 73564 *Radiologic examination, knee; complete, 4 or more views* (work RVU = 0.22, 1 minute pre-service time, 5 minutes intra-service time, 1 minute post-service time) and noted that the times are identical while acknowledging that these codes apply to the extremities unlike CPT code 70260 which is an axillary skeletal radiograph. Therefore, the RUC recommends a direct crosswalk from CPT code 74022 to 70260. **The RUC recommends a work RVU of 0.32 for CPT code 70260.**

Practice Expense

The RUC recommends the direct practice expense inputs with one correction (removal of the gown) as modified by the Practice Expense Subcommittee.

Work Neutrality

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

X-Ray Exam – Neck (Tab 17)

Kurt Schoppe, MD (ACR); Daniel Wessell, MD (ACR); Gregory Nicola, MD (ASNR); Melissa Chen, MD (ASNR); Thomas Kintanar, MD (AAFP); Mary Newman, MD (ACP); Tanvir Hussain, MD (ACP)

In October 2017, the Relativity Assessment Workgroup requested that AMA staff compile a list of CMS/Other codes with Medicare utilization of 30,000 or more. In January 2018, the RUC recommended to crosswalk these services like other recent similar radiology recommendations for April 2018, if approved by the Research Subcommittee.

In February, the Research Subcommittee approved for the specialties to utilize a crosswalk methodology to make physician work and physician time recommendations in lieu of conducting a RUC survey. The Research Subcommittee had reviewed the recommendation made by the specialty societies to crosswalk times and values for these identified codes to other codes performed by the specialty societies. On the

Research Subcommittee conference call, the specialty societies explained that when determining an appropriate crosswalk, they tried to find RUC reviewed codes that were similar in service and time, performed on similar anatomical site, required similar number of views and required similar patient positions. The Research Subcommittee agreed that the methodology employed by the specialty was appropriate for these services, noting past precedent of the Research Subcommittee approving a similar request for X-ray codes in April 2017 and in 2010. As part of its discussion, the Subcommittee noted that it would not recommend for the specialty to propose using lower work RVU crosswalks to justify maintaining the value of higher work RVU codes.

The Research Subcommittee approved the crosswalk/reference code methodology as proposed by the specialty societies to be appropriate for codes 70210, 70220, 70250, 70260, 70360, 72170, 72190.

70360 Radiologic examination; neck, soft tissue

CPT code 70360 is an x-ray procedure used to assess the airway and soft tissues of the neck, with potential evaluation of foreign bodies. A 2-view exam is typical. The RUC reviewed the descriptions of work and the expert panel recommendations and agreed on the following physician time components: pre-service time of 1 minute, intra-service time of 3 minutes and post-service time of 1 minute.

The RUC agreed with the specialty societies that the current work RVU of 0.17 for CPT code 70360 should be maintained. The RUC compared the code under review to CPT code 74018 *Radiologic examination, abdomen; 1 view* (work RVU = 0.18, 1 minute pre-service time, 3 minutes intra-service time, 1 minute post-service time) and noted that both services should be valued similarly as both studies have identical intra-service and total times. Although the number of views varies with respect to the reference code, the RUC agreed that the magnitude of work is similar and the work RVUs are nearly identical. For additional support, the RUC compared CPT code 70360 to three other radiology codes: CPT code 73080 *Radiologic examination, elbow; complete, minimum of 3 views* (work RVU = 0.17, 1 minute pre-service time, 3 minutes intra-service time, 1 minute post-service time); 73610 *Radiologic examination, ankle; complete, minimum of 3 views* (work RVU = 0.17, 1 minute pre-service time, 3 minutes intra-service time, 1 minute post-service time) and 73630 *Radiologic examination, foot; complete, minimum of 3 views* (work RVU = 0.17, 1 minute pre-service time, 3 minutes intra-service time, 1 minute post-service time) and noted that the physician work and times are identical while acknowledging that these codes apply to the extremities unlike CPT code 70360 which is an axillary skeletal radiograph. **The RUC recommends a work RVU of 0.17 for CPT code 70360.**

Practice Expense

The Practice Expense (PE) Subcommittee noted that the non-facility billed together data show that multiple codes are billed on the same day. The specialty societies did not think that the codes billed together in the non-facility setting were clinically appropriate and they requested additional time to review the non-facility data. Further, the PE Subcommittee and the specialty society agreed that further analysis of local and regional variations is necessary. The PE Subcommittee and the specialty societies agreed to review the practice expense inputs again at the next PE Subcommittee meeting and remove any staff time, supplies and equipment that is found to be duplicative. The RUC recommends the direct practice expense inputs as submitted by the specialty society. **The RUC recommends that the direct practice expense inputs be accepted as Interim and revisited at the October 2018 RUC meeting.**

CT Spine (Tab 18)

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

In October 2017, the Relativity Assessment Workgroup requested that AMA staff compile a list of CMS/Other codes with Medicare utilization of 30,000 or more. In January 2018, the RUC recommended to

survey these services for April 2018. CPT code 72132 was identified by this screen and eight other CT spine codes were identified as part of the family. The recommendation for all the codes is to maintain the present value which falls below the survey 25th percentile and maintains relativity, not only across the CT spine family, but also the larger family of RUC-reviewed CT codes.

In October 2008, the codes for CT of the cervical, thoracic and lumbar spine performed without contrast (CPT codes 72125, 72128 and 72131) were surveyed and the RUC recommended values of 1.16 based on survey times of 5/15/5 minutes. In the Final Rule, CMS reduced the work RVU to 1.00 for all CT spine without contrast codes, but kept the times recommended by the RUC. The specialty societies wrote to CMS and ultimately the work RVU for CPT code 72125 (CT cervical spine without contrast) was adjusted to 1.07 to account for increased complexity. CMS maintained their valuation of CPT codes 72128 and 72131 (CT thoracic spine and CT lumbar spine without contrast) at 1.00 work RVUs. Because CMS reduced the work RVU for these codes but kept the RUC recommended survey times, there is incongruence between times in the RUC database (5/15/ 5 minutes) and the existing work RVU. Therefore, even though the 2018 intra-service survey times for CPT codes 72125, 72128, and 72131 are 3 minutes lower than the existing intra-service times, the RUC believes the existing work RVUs are appropriate for the magnitude of work for these codes. The RUC agreed to maintain the values below the 25th percentile with median survey times. The base codes (without contrast) had been surveyed before and compelling evidence was not requested such that relativity across the code family would be maintained.

72125 Computed tomography, cervical spine; without contrast material

CPT code 72125 is an important tool in investigating cervical spine fracture/traumatic injury as well as the location/type/extent of a known infectious/inflammatory/neoplastic process involving the cervical spinal column. The RUC reviewed the survey results from 76 radiologists and neuroradiologists and agreed with following physician time components: pre-service time of 5 minutes, intra-service time of 12 minutes and post-service time of 5 minutes.

The RUC determined that the current value of 1.07 which falls below the survey 25th percentile appropriately accounts for the work required to perform this service. The RUC agreed that the CT cervical spine is a more complex study than the thoracic and lumbar spine because the cervical spine is subject to an increased number of injuries and there are a larger number of articulations to evaluate including the joints at the craniocervical junction, facet and uncovertebral joints. Therefore this code should be valued slightly higher than the other without contrast codes. The RUC compared the survey code to the top key reference service code 70490 *Computed tomography, soft tissue neck; without contrast material* (work RVU = 1.28, 5 minutes pre-service time, 15 minutes intra-service time, 5 minutes post-service time) and noted that the reference code involves more physician work, more intra-service time, and nearly identical intensity. The CT neck has more soft tissue detail with more structures to evaluate when compared to the CT cervical spine, which explains the slight increase in time. Further, most survey respondents found the intensity and complexity of the codes to be nearly identical.

For additional support, the RUC referenced MPC code 70460 *Computed tomography, head or brain; with contrast material(s)* (work RVU = 1.13, 5 minutes pre-service time, 12 minutes intra-service time, 5 minutes post-service time) which has identical service times, involves more physician work, and a slightly higher intensity. The evaluation of the brain parenchyma for abnormalities and subtle enhancement requires more technical skill and is a more complex organ system to evaluate than the spine and accounts for the difference in work RVU and intensity. The RUC agreed that the current work RVU for 72125 of 1.07 should be maintained. **The RUC recommends a work RVU of 1.07 for CPT code 72125.**

72126 Computed tomography, cervical spine; with contrast material

CPT code 72126 is an important tool in investigating infectious, inflammatory, or neoplastic process involving the cervical spinal column. The RUC reviewed the survey results from 76 radiologists and neuroradiologists and agreed with following physician time components: pre-service time of 5 minutes, intra-service time of 15 minutes and post-service time of 5 minutes.

The RUC determined that the current value of 1.22 which falls below the survey 25th percentile appropriately accounts for the work required to perform this service. The RUC compared the survey code to the top key reference service code 70491 *Computed tomography, soft tissue neck; with contrast material(s)* (work RVU = 1.38, 5 minutes pre-service time, 17 minutes intra-service time, 5 minutes post-service time) and noted that the reference code has more intra-service time and similar intensity with a proportional difference in physician work. The CT neck with contrast reveals more soft tissue anatomy compared to the CT cervical spine with more structures to evaluate, which explains the increase in time. Further, most survey respondents found the intensity and complexity of the codes to be nearly identical.

For additional support, the RUC referenced MPC code 70470 *Computed tomography, head or brain; without contrast material, followed by contrast material(s) and further sections* (work RVU = 1.27, 5 minutes pre-service time, 15 minutes intra-service time, 5 minutes post-service time) which has identical times and a similar intensity. The evaluation of the brain parenchyma for abnormalities and subtle enhancement requires more technical skill and is a more complex organ system to evaluate than the spine and accounts for the difference in physician work and intensity. The RUC agreed that the current work RVU for 72126 of 1.22 should be maintained. **The RUC recommends a work RVU of 1.22 for CPT code 72126.**

72127 Computed tomography, cervical spine; without contrast material, followed by contrast material(s) and further sections

CPT code 72127 is primarily used as a tool in patients with cervical spine pain, usually with prior history of cervical spine surgery or in patients with concern for malignancy or infection and MRI cannot be obtained. The RUC reviewed the survey results from 76 radiologists and neuroradiologists and agreed with following physician time components: pre-service time of 5 minutes, intra-service time of 17 minutes and post-service time of 5 minutes.

The RUC determined that the current value of 1.27, which falls below the survey 25th percentile, appropriately accounts for the work required to perform this service. The RUC agreed that CPT code 72127, compared to 72125, is less frequently performed in the ER and outpatient setting. The patient population is therefore less complex. In addition, unlike other CT examinations such as CT of the neck, the addition of contrast for CT of the spine does not add a proportionate amount of complexity to the work because the CT algorithm of the spine optimizes for evaluation of the bony structures, rather than the soft tissues. These two factors of decreased intensity and complexity contribute to the decreased intensity compared to the 72125 code.

The RUC compared the survey code to the top key reference service code 70492 *Computed tomography, soft tissue neck; without contrast material followed by contrast material(s) and further sections* (work RVU = 1.62, 5 minutes pre-service time, 20 minutes intra-service time, 5 minutes post-service time) and noted that the reference code has more intra-service time and slightly higher intensity. Again, the addition of contrast for a CT cervical spine, unlike when CT is performed in other body regions such as CT of the neck, is not as complex because the CT spine technique is optimized to evaluate the bony structures rather than the soft tissues. The level of anatomic detail revealed with the addition of contrast is less than CT neck, which accounts for the decreased complexity and lower intensity for CPT code 72127.

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, 5 minutes pre-service time, 18 minutes intra-service time, 5 minutes post-service time) which has similar intra-service and total times, with slightly higher intensity. The CT abdomen without and with IV contrast is a study typically performed as a multiphase contrast enhanced exam to assess a liver mass. Understanding the nuance of contrast enhancement pattern in the lesions requires more technical skill and is subsequently more complex and intense, which accounts for the higher work RVU and intensity. The RUC agreed that the current work RVU for 72127 of 1.27 should be maintained. **The RUC recommends a work RVU of 1.27 for CPT code 72127.**

72128 Computed tomography, thoracic spine; without contrast material

CPT code 72128 is an important tool in investigating thoracic spine fracture/traumatic injury as well as the location/type/extent of a known infectious/inflammatory/neoplastic process involving the thoracic spinal column. The RUC reviewed the survey results from 76 radiologists and neuroradiologists and agreed with following physician time components: pre-service time of 5 minutes, intra-service time of 12 minutes and post-service time of 5 minutes.

The RUC determined that the current value of 1.00 which falls below the survey 25th percentile appropriately accounts for the work required to perform this service. The RUC agreed that the CT thoracic spine is a less complex study than the cervical spine because the cervical spine is subject to an increased number of injuries and there are a larger number of articulations to evaluate including the joints at the craniocervical junction, facet and uncovertebral joints. Therefore CPT code 72128, the base code (without contrast) for thoracic spine, should be valued slightly lower than the base code for cervical spine, CPT code 72125. The RUC compared the survey code to the top key reference service code 72148 *Magnetic resonance (eg, proton) imaging, spinal canal and contents, lumbar; without contrast material* (work RVU = 1.48, 5 minutes pre-service time, 20 minutes intra-service time, 5 minutes post-service time) and noted that the reference code involves more physician work, more intra-service time, and similar intensity. The MR lumbar spine is more technically challenging to read because of its higher soft tissue contrast, challenging artifacts, and complex pulse sequences not inherent in CT thoracic spine, which explains the increase in time. Further, most survey respondents found that the intensity and complexity of CPT code 72128 is somewhat less than 72148 and identical to the second key reference service code 71250 *Computed tomography, thorax; without contrast material* (work RVU = 1.16, 5 minutes pre-service time, 15 minutes intra-service time, 5 minutes post-service time). Although the codes are predominantly performed in the outpatient setting, CPT code 72128 is more frequently performed in the ER setting compared to the two key reference services, and therefore the patient population is more complex, which contributes to a slightly higher intensity for the survey code.

For additional support, the RUC referenced MPC code 70460 *Computed tomography, head or brain; with contrast material(s)* (work RVU = 1.13, 5 minutes pre-service time, 12 minutes intra-service time, 5 minutes post-service time) which has identical service times, involves more physician work and a slightly higher intensity. The evaluation of the brain parenchyma for abnormalities and subtle enhancement requires more technical skill and is a more complex organ system to evaluate than the spine and accounts for the difference in work RVU and intensity. The RUC agreed that the current work RVU for 72128 of 1.00 should be maintained. **The RUC recommends a work RVU of 1.00 for CPT code 72128.**

72129 Computed tomography, thoracic spine; with contrast material

CPT code 72129 is an important tool in investigating infectious, inflammatory, or neoplastic process involving the thoracic spinal column, typically when the patient cannot undergo MRI. The RUC reviewed the survey results from 76 radiologists and neuroradiologists and agreed with following physician time components: pre-service time of 5 minutes, intra-service time of 15 minutes and post-service time of 5 minutes.

The RUC determined that the current value of 1.22 which falls below the survey 25th percentile appropriately accounts for the work required to perform this service. The RUC compared the survey code to the second key reference service code 71260 *Computed tomography, thorax; with contrast material(s)* (work RVU = 1.24, 5 minutes pre-service time, 16 minutes intra-service time, 5 minutes post-service time) and noted that the reference code involves slightly more physician work and one minute more of intra-service time. CPT code 72129 is more frequently performed in the ER/inpatient setting compared to the reference service, and therefore the patient population is slightly more complex, which accounts for the slight increase in intensity.

For additional support, the RUC referenced MPC code 70470 *Computed tomography, head or brain; without contrast material, followed by contrast material(s) and further sections* (work RVU = 1.27, 5 minutes pre-service time, 15 minutes intra-service time, 5 minutes post-service time) which has identical times and a similar intensity. The evaluation of the brain parenchyma for abnormalities and subtle enhancement requires more technical skill and is a more complex organ system to evaluate than the spine and accounts for the difference in work RVU and intensity. The RUC agreed that the current work RVU for 72129 of 1.22 should be maintained. **The RUC recommends a work RVU of 1.22 for CPT code 72129.**

72130 Computed tomography, thoracic spine; without contrast material, followed by contrast material(s) and further sections

CPT code 72130 is primarily used as a tool in patients with thoracic spine pain, or in patients with concern for infection and MRI cannot be obtained. The RUC reviewed the survey results from 76 radiologists and neuroradiologists and agreed with following physician time components: pre-service time of 5 minutes, intra-service time of 18 minutes and post-service time of 5 minutes.

The RUC determined that the current value of 1.27 which falls below the survey 25th percentile appropriately accounts for the work required to perform this service. The RUC agreed that CPT code 72130 compared to 72128 is less frequently performed in the ER and outpatient setting. The patient population is therefore less complex. In addition, unlike other CT examinations such as CT of the chest, the addition of contrast for CT of the spine does not add a proportionate amount of complexity to the work because the CT algorithm of the spine optimizes for evaluation of the bony structures, rather than the soft tissues. These 2 factors of decreased intensity and complexity coincide with the decreased IWP/UT compared to the 72130 code.

The RUC compared the survey code to the top key reference service code 72158 *Magnetic resonance (eg, proton) imaging, spinal canal and contents, without contrast material, followed by contrast material(s) and further sequences; lumbar* (work RVU = 2.29, 5 minutes pre-service time, 25 minutes intra-service time, 5 minutes post-service time) and noted that the reference code has more intra-service time, involves more physician work and has a higher intensity. Again, the addition of contrast for a CT spine, unlike other modalities such as CT of the neck, is not as complex because the CT spine technique is optimized to evaluate the bony structures rather than the soft tissues. The level of anatomic detail revealed with the addition of contrast is less than CT neck which accounts for the decreased complexity and lower intensity for CPT code 72130. Further, most survey respondents found that the intensity and complexity of CPT code 72130 to be somewhat less than 72158. The RUC also compared the survey code to the second key reference service code 71270 *Computed tomography, thorax; without contrast material, followed by contrast material(s) and further sections* (work RVU = 1.38, 5 minutes pre-service time, 20 minutes intra-service time, 5 minutes post-service time) and noted that the reference code has slightly higher intra-service time, with a proportionate increase in physician work, resulting in the same intensity as CPT code 72130.

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, 5 minutes pre-service time, 18 minutes intra-service time, 5 minutes post-service time) which has identical intra-service and total times, with slightly higher intensity. The CT abdomen without and with IV contrast is a study typically performed as a multiphase contrast enhanced exam to assess a liver mass. Understanding the nuance of contrast enhancement pattern in the lesions requires more technical skill and is subsequently more complex and intense, which accounts for the higher work RVU and intensity. The RUC agreed that the current work RVU for 72130 of 1.27 should be maintained. **The RUC recommends a work RVU of 1.27 for CPT code 72130.**

72131 *Computed tomography, lumbar spine; without contrast material*

CPT code 72131 is an important tool in investigating lumbar spine fracture/traumatic injury as well as the location/type/extent of a known infectious/inflammatory/neoplastic process involving the lumbar spinal column. The RUC reviewed the survey results from 76 radiologists and neuroradiologists and agreed with following physician time components: pre-service time of 5 minutes, intra-service time of 12 minutes and post-service time of 5 minutes.

The RUC determined that the current value of 1.00, which falls below the survey 25th percentile, appropriately accounts for the work required to perform this service. The RUC agreed that the CT lumbar spine is a less complex study than the cervical spine because the cervical spine is subject to an increased number of injuries and there are a larger number of articulations to evaluate including the joints at the craniocervical junction, facet and uncovertebral joints. Therefore CPT code 72131, the base code (without contrast) for lumbar spine, should be valued slightly lower than the base code for cervical spine, CPT code 72125. The RUC compared the survey code to the top key reference service code 72148 *Magnetic resonance (eg, proton) imaging, spinal canal and contents, lumbar; without contrast material* (work RVU = 1.48, 5 minutes pre-service time, 20 minutes intra-service time, 5 minutes post-service time) and noted that the reference code involves more physician work, more intra-service time, and similar intensity. The MR lumbar is more technically challenging to read because of its higher soft tissue contrast, challenging artifacts, and complex pulse sequences not inherent in CT lumbar spine, which explains the increase in time.. CPT code 72131 is far more frequently performed in the ER and inpatient setting compared to 72148, and therefore the patient population is slightly more complex, which accounts for the slight increase in intensity. The second key reference service code 74176 *Computed tomography, abdomen and pelvis; without contrast material* (work RVU = 1.74, 5 minutes pre-service time, 22 minutes intra-service time, 5 minutes post-service time) requires evaluation of a larger anatomic region including visceral and solid organs, accounting for the increase of 10 minutes intra-service time. It is also more frequently performed in the ER and inpatient setting than CPT code 72131, and therefore the patient population is more complex, which accounts for the increased intensity. Accordingly, most survey respondents found that the intensity and complexity of CPT code 72131 is identical or somewhat less than CPT codes 72148 and 74176.

For additional support, the RUC referenced MPC code 70460 *Computed tomography, head or brain; with contrast material(s)* (work RVU = 1.13, 5 minutes pre-service time, 12 minutes intra-service time, 5 minutes post-service time) which has identical service times, involves more physician work, and a slightly higher intensity. The evaluation of the brain parenchyma for abnormalities and subtle enhancement requires more technical skill and is a more complex organ system to evaluate than the spine and accounts for the difference in work RVU and intensity. The RUC agreed that the current work RVU for 72131 of 1.00 should be maintained. **The RUC recommends a work RVU of 1.00 for CPT code 72131.**

72132 Computed tomography, lumbar spine; with contrast material

CPT code 72132 is an important tool in investigating infectious, inflammatory, or neoplastic process involving the lumbar spinal column, typically when MRI cannot be performed. The RUC reviewed the survey results from 76 radiologists and neuroradiologists and agreed with following physician time components: pre-service time of 5 minutes, intra-service time of 14 minutes and post-service time of 5 minutes.

The RUC determined that the current value of 1.22 which falls below the survey 25th percentile appropriately accounts for the work required to perform this service. The RUC compared the survey code to the top key reference service code 72149 *Magnetic resonance (eg, proton) imaging, spinal canal and contents, lumbar; with contrast material(s)* (work RVU = 1.78, 5 minutes pre-service time, 23 minutes intra-service time, 5 minutes post-service time) and noted that the reference code involves more physician work, more intra-service time, and similar intensity. The MR lumbar is more technically challenging to read because of its higher soft tissue contrast, challenging artifacts, and complex pulse sequences not inherent in CT lumbar spine, which explains the increase in time. . CPT code 72132 is more frequently performed in the ER and inpatient setting compared to 72149, and therefore the patient population is more complex, which contributes to a higher intensity for the survey code.

For additional support, the RUC referenced MPC code 70470 *Computed tomography, head or brain; without contrast material, followed by contrast material(s) and further sections* (work RVU = 1.27, 5 minutes pre-service time, 15 minutes intra-service time, 5 minutes post-service time) which has similar times and intensity. The comparison code has more images to evaluate than CPT code 72132 accounting for the slight differences in intra-service time and physician work. The RUC agreed that the current work RVU for 72132 of 1.22 should be maintained. **The RUC recommends a work RVU of 1.22 for CPT code 72132.**

72133 Computed tomography, lumbar spine; without contrast material, followed by contrast material(s) and further sections

CPT code is primarily used as a tool in patients with lumbar spine pain or in patients with concern for infection and MRI cannot be obtained. The RUC reviewed the survey results from 76 radiologists and neuroradiologists and agreed with following physician time components: pre-service time of 5 minutes, intra-service time of 18 minutes and post-service time of 5 minutes.

The RUC determined that the current value of 1.27 which falls below the survey 25th percentile appropriately accounts for the work required to perform this service. The RUC agreed that CPT code 72133 compared to 72131 is less frequently performed in the ER and outpatient setting, and therefore the patient population is less complex. In addition, unlike other CT examinations such as CT of the abdomen/pelvis, the addition of contrast for CT of the spine does not add a proportionate amount of complexity to the work because the CT algorithm of the spine optimizes for evaluation of the bony structures, rather than the soft tissues. These 2 factors of decreased complexity contribute to the decreased intensity compared to the 72133 code.

The RUC compared the survey code to the top key reference service code 72158 *Magnetic resonance (eg, proton) imaging, spinal canal and contents, without contrast material, followed by contrast material(s) and further sequences; lumbar* (work RVU = 2.29, 5 minutes pre-service time, 25 minutes intra-service time, 5 minutes post-service time) and noted that the reference code has more intra-service time, involves more physician work and higher intensity. Again, the addition of contrast for a CT spine, unlike other modalities such as CT of the neck, is not as complex because the CT spine technique is optimized to evaluate the bony structures rather than the soft tissues. The level of anatomic detail revealed with the addition of contrast is less than CT neck and this accounts for the decreased complexity and lower intensity for CPT code 72133. The RUC also compared the survey code to the second key reference

service code 74178 *Computed tomography, abdomen and pelvis; without contrast material in one or both body regions, followed by contrast material(s) and further sections in one or both body regions* (work RVU = 2.01, 5 minutes pre-service time, 30 minutes intra-service time, 5 minutes post-service time) and noted that the reference code has more intra-service time, with a proportionate increase in physician work, resulting in a similar intensity as CPT code 72133.

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, 5 minutes pre-service time, 18 minutes intra-service time, 5 minutes post-service time) which has identical intra-service and total times, with slightly higher intensity. The CT abdomen pelvis without and with IV contrast is a study typically performed as a multiphase contrast enhanced exam to assess masses involving the solid organs. Understanding the nuance of contrast enhancement pattern in the lesions requires more technical skill and is subsequently more complex and intense, which accounts for the higher work RVU and intensity. The RUC agreed that the current work RVU for 72133 of 1.27 should be maintained. **The RUC recommends a work RVU of 1.27 for CPT code 72133.**

Practice Expense

The Practice Expense (PE) Subcommittee made several adjustments that accounted for the multiple payment procedure reduction, removed a heparin lock (SC012) and stop cock (SC049), and corrected equipment minutes (EL007). The RUC recommends the direct practice expense inputs as modified by the PE Subcommittee.

X-Ray Exam – Pelvis (Tab 19)

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

In October 2017, the Relativity Assessment Workgroup requested that AMA staff compile a list of CMS/Other codes with Medicare utilization of 30,000 or more. In January 2018, the RUC recommended to crosswalk these services like other recent similar radiology recommendations for April 2018, if approved by the Research Subcommittee.

In February, the Research Subcommittee approved for the specialties to utilize a crosswalk methodology to make physician work and physician time recommendations in lieu of conducting a RUC survey. The Research Subcommittee had reviewed the recommendation made by the specialty societies to crosswalk times and values for these identified codes to other codes performed by the specialty societies. On the Research Subcommittee conference call, the specialty societies explained that when determining an appropriate crosswalk, they tried to find RUC reviewed codes that were similar in service and time, performed on similar anatomical site, required similar number of views and required similar patient positions. The Research Subcommittee agreed that the methodology employed by the specialty was appropriate for these services, noting past precedent of the Research Subcommittee approving a similar request for X-ray codes in April 2017 and in 2010. As part of its discussion, the Subcommittee noted that it would not recommend for the specialty to propose using lower work RVU crosswalks to justify maintaining the value of higher work RVU codes.

The Research Subcommittee approved the crosswalk/reference code methodology as proposed by the specialty societies to be appropriate for codes 70210, 70220, 70250, 70260, 70360, 72170, 72190.

72170 Radiologic examination, pelvis; 1 or 2 views

CPT code 72170 is in the family of x-ray codes used to evaluate the pelvis-*only*, distinct from the set of codes created for the hips in which the pelvis was bundled in and is typically performed as a one view pelvis radiograph. The RUC reviewed the descriptions of work and the expert panel recommendations

and agreed on the following physician time components: pre-service time of 1 minute, intra-service time of 3 minutes and post-service time of 1 minute.

The RUC agreed that the current work RVU of 0.17 for CPT code 72170 should be maintained. The RUC compared the code under review to CPT code 73501 *Radiologic examination, hip, unilateral, with pelvis when performed; 1 view* (work RVU = 0.18, 1 minute pre-service time, 3 minutes intra-service time, 1 minute post-service time) and noted that the intra-service time for CPT code 72170 was reduced by 1 minute to match the reference code. Both services should be valued similarly given the identical intra-service and total times which are strongly supported by the reference code and fit appropriately in regard to relativity with the recently valued hip and hip/pelvis bundled codes. In addition, the RUC compared CPT code 72170 to CPT code 74018 *Radiologic examination, abdomen; 1 view* (work RVU = 0.18, 1 minute pre-service time, 3 minutes intra-service time, 1 minute post-service time) and again noted that both services should be valued similarly as both studies have identical intra-service and total times and involve a similar number of views. **The RUC recommends a work RVU of 0.17 for CPT code 72170.**

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

CPT code 72190 is in the family of x-ray codes used to evaluate the pelvis-*only*. Typical number of views is a three-view exam. The RUC reviewed the descriptions of work and the expert panel recommendations and agreed on the following physician time components: pre-service time of 1 minute, intra-service time of 4 minutes and post-service time of 1 minute.

The RUC agreed that the current work RVU of 0.21 for CPT code 72190 should be maintained. The RUC compared the code under review to CPT code 73502 *Radiologic examination, hip, unilateral, with pelvis when performed; 2-3 views* (work RVU = 0.22, 1 minute pre-service time, 4 minutes intra-service time, 1 minute post-service time) and noted that both services should be valued similarly as both studies have identical intra-service and total times. The typical patient for both of these examinations involves acute traumatic injury, often in an emergent setting necessitating timely evaluation and medical decision-making. The amount of physician work is nearly identical and the times are strongly supported by the reference code. For additional support, the RUC compared CPT code 72190 to MPC code 92567 *Tympanometry (impedance testing)* (work RVU = 0.20, 1 minute pre-service time, 4 minutes intra-service time, 1 minute post-service time) and noted a favorable comparison to the non-radiology service with identical intra-service and total times and nearly identical work RVUs. **The RUC recommends a work RVU of 0.21 for CPT code 72190.**

Practice Expense:

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

X-Ray Exam – Clavicle/ Shoulder (Tab 20)

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

In October 2017, the RAW requested that AMA staff compile a list of CMS/Other codes with Medicare utilization of 30,000 or more. In January 2018, the RUC recommended to survey these services for April 2018.

73000 Radiologic examination; clavicle, complete

The RUC reviewed the survey results from 82 physicians and agreed with the following physician time components: pre-service time of 1 minute, intra-service time of 3 minutes and post-service time of 1 minute, for a combined total of 5 minutes. The RUC determined that the current work RVU of 0.16, which is also the survey 25th percentile, appropriately accounts for the physician work involved to perform this service. The RUC noted that codes 73000, 73010, and 73020 require the same physician

time, however, they are recommending slight differences in work values based on intensity and complexity. To justify the work RVU of 0.16, the RUC reviewed the top key reference code 73060 *Radiologic examination; humerus, minimum of 2 views* (work RVU= 0.16, pre-service time of 1 minute, intra-service time of 3 minutes, and post-service time of 1 minute), and noted that both services require identical times, as well as the same amount of physician work, and therefore should be valued identically. To further justify a recommended work RVU of 0.16, the RUC reviewed the second key MPC comparison code 73120 *Radiologic examination, hand; 2 views* (work RVU= 0.16, pre-service time of 1 minute, intra-service time of 4 minutes, and post-service time of 1 minute), and found that the survey code is appropriately valued because both codes require similar physician work and time, and should therefore be valued similarly. **The RUC recommends a work RVU of 0.16 for CPT code 73000.**

73010 Radiologic examination; scapula, complete

The RUC reviewed the survey results from 82 physicians and agreed with the following physician time components: pre-service time of 1 minute, intra-service time of 3 minutes and post-service time of 1 minute, for a combined total of 5 minutes. The RUC determined that the current work RVU of 0.17, which is also the survey 25th percentile, appropriately accounts for the physician work involved to perform this service. The RUC noted that codes 73000, 73010, and 73020 require the same physician time, however, they are recommending slight differences in work values based on intensity and complexity. To justify the work RVU of 0.17, the RUC reviewed the top key reference service code 73610 *Radiologic examination, ankle; complete, minimum of 3 views* (work RVU= 0.17, pre-service time of 1 minute, intra-service time of 3 minutes, and post-service time of 1 minute), and noted that both services require an identical amount of work and times and should be valued similarly. To further justify a work RVU of 0.17, the RUC reviewed the second key reference code 73060 *Radiologic examination; humerus, minimum of 2 views* (work RVU= 0.16, pre-service time of 1 minute, intra-service time of 3 minutes, and post-service time of 1 minute), and found that the survey code is appropriately valued because it is more intense and complex to perform as indicated by 100% of the survey respondents, and should therefore be valued similarly due to both requiring the same physician time to perform. **The RUC recommends a work RVU of 0.17 for CPT code 73010.**

73020 Radiologic examination, shoulder; 1 view

The RUC reviewed the survey results from 82 physicians and agreed with the following physician time components: pre-service time of 1 minute, intra-service time of 3 minutes and post-service time of 1 minute, for a combined total of 5 minutes. The RUC determined that a work RVU of 0.15, which is the current value and below the survey 25th percentile, appropriately accounts for the physician work involved to perform this service. The RUC noted that codes 73000, 73010, and 73020 require the same physician time, however, they are recommending slight differences in work values based on intensity and complexity. To justify the work RVU of 0.15, the RUC reviewed top key reference code 73060 *Radiologic examination; humerus, minimum of 2 views* (work RVU= 0.16, pre-service time of 1 minute, intra-service time of 3 minutes, and post-service time of 1 minute), and noted that both services require identical time and should be valued similarly. To further justify a work RVU of 0.15, the RUC reviewed MPC code 93042 *Rhythm ECG, 1-3 leads; interpretation and report only* (work RVU= 0.15, pre-service time of 2 minutes, intra-service time of 3 minutes, and post-service time of 2 minutes), and found that the survey code is appropriately valued because both codes require an identical amount of physician work and identical intra-service times, further justifying a work RVU of 0.15 for the survey code. **The RUC recommends a work RVU of 0.15 for CPT code 73020.**

73030 Radiologic examination, shoulder; complete, minimum of 2 views

The RUC reviewed the survey results from 82 physicians and agreed with the following physician time components: pre-service time of 1 minute, intra-service time of 4 minutes and post-service time of 1 minute, for a combined total of 6 minutes. The RUC determined that a work RVU of 0.18, which is the current value and at the survey 25th percentile, appropriately accounts for the physician work involved to

perform this service. To justify the work RVU of 0.18, the RUC compared the survey code to the top key reference code 73562 *Radiologic examination, knee; 3 views* (work RVU= 0.18, pre-service time of 1 minute, intra-service time of 4 minutes, and post-service time of 1 minute), and noted that both services require identical times and should be valued identically. To further justify a work RVU of 0.18, the RUC reviewed code 73552 *Radiologic examination, femur; minimum 2 views* (work RVU= 0.18, pre-service time of 1 minute, intra-service time of 4 minutes, and post-service time of 1 minute), and found that the survey code is appropriately valued because it requires identical intra-service and total times, further supporting a work value of 0.18 for the survey code. **The RUC recommends a work RVU of 0.18 for CPT code 73030.**

73050 Radiologic examination; acromioclavicular joints, bilateral, with or without weighted distraction
The RUC reviewed the survey results from 75 physicians and agreed with the following physician time components: pre-service time of 1 minute, intra-service time of 4 minutes and post-service time of 1 minute, for a combined total of 6 minutes. The RUC determined that a work RVU of 0.18, which is below the current value and at the survey 25th percentile, appropriately accounts for the physician work involved to perform this service. To justify the work RVU of 0.18, the RUC compared the survey code to code 73562 *Radiologic examination, knee; 3 views* (work RVU= 0.18, pre-service time of 1 minute, intra-service time of 4 minutes, and post-service time of 1 minute), and noted that both services require identical times and should be valued identically. To further justify a work RVU of 0.18, the RUC reviewed code 73552 *Radiologic examination, femur; minimum 2 views* (work RVU= 0.18, pre-service time of 1 minute, intra-service time of 4 minutes, and post-service time of 1 minute), and found that the survey code is appropriately valued because it requires identical intra-service and total times, which further supports a recommended work value of 0.18 for the survey code. **The RUC recommends a work RVU of 0.18 for CPT code 73050.**

Practice Expense

The Practice Expense (PE) Subcommittee removed 1 minute of clinical staff time for clinical activity, prepare, set-up and start IV, initial positioning and monitoring of patient (CA016). The PE Subcommittee noted that the non-facility billed together data show that multiple codes are billed on the same day. The specialty societies did not think that the codes billed together in the non-facility setting were clinically appropriate and they requested additional time to review the non-facility data. Further, the PE Subcommittee and the specialty society agreed that further analysis of local and regional variations is necessary. The PE Subcommittee and the specialty societies agreed to review the practice expense inputs again at the next PE Subcommittee meeting and remove any staff time, supplies and equipment that is found to be duplicative. The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee. **The RUC recommends that the direct practice expense inputs be accepted as Interim and revisited at the October 2018 RUC meeting.**

Work Neutrality

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

CT Lower Extremity (Tab 21)

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

In October 2017, the RAW requested that AMA staff compile a list of CMS/Other codes with Medicare utilization of 30,000 or more. In January 2018, the RUC recommends to survey these services for April 2018.

73700 Computed tomography, lower extremity; without contrast material

The RUC reviewed the survey results from 55 physicians and agreed with the following physician time components: pre-service time of 4 minute, intra-service time of 12 minutes, and post-service time of 4 minutes, for a combined total of 20 minutes. The RUC determined that a work RVU of 1.00, which is the current value and below the survey 25th percentile, appropriately accounts for the physician work involved to perform this service. The RUC noted that the survey code was valued by the RUC in October 2009 at the 25th percentile of 1.09 however, CMS did not accept the recommended work RVU and reduced the value to 1.00, but accepted the physician time. This disrupted the relationship of the physician work and time associated with the original recommendation. Therefore, maintaining the current work RVU of 1.00 with the slightly lower survey intra-service time of 12 minutes, reestablishes the correct work and time for this service. To justify the work RVU of 1.00, the RUC reviewed code 78453 *Myocardial perfusion imaging, planar (including qualitative or quantitative wall motion, ejection fraction by first pass or gated technique, additional quantification, when performed); single study, at rest or stress (exercise or pharmacologic)* (work RVU= 1.00, pre-service time of 5 minutes, intra-service time of 10 minutes, and post-service time of 5 minutes), and noted that both services require an identical amount of physician work and identical total times. To further justify a work RVU of 1.00, the RUC reviewed the second key reference code 74150 *Computed tomography, abdomen; without contrast material* (work RVU= 1.19, pre-service time of 3 minutes, intra-service time of 12 minutes, and post-service time of 5 minutes), and noted that both services require identical intra-service times and similar total times, further justifying the recommended work value for the survey code. **The RUC recommends a work RVU of 1.00 for CPT code 73700.**

73701 Computed tomography, lower extremity; with contrast material(s)

The RUC reviewed the survey results from 55 physicians and agreed with the following physician time components: pre-service time of 5 minutes, intra-service time of 14 minutes and post-service time of 5 minutes, for a combined total of 24 minutes. The previous valuation and times for this code were from CMS or another unknown source and should not be compared to the current survey times. The RUC determined that a work RVU of 1.16, which is the current value and below the survey 25th percentile, appropriately accounts for the physician work involved to perform this service. To justify the work RVU of 1.16, the RUC compared the survey code to code 70470 *Computed tomography, head or brain; without contrast material, followed by contrast material(s) and further sections* (work RVU= 1.27, pre-service time of 5 minutes, intra-service time of 15 minutes, and post-service time of 5 minutes), and noted that both services require similar total times and intra-service times. To further justify a work RVU of 1.16, the RUC reviewed 70544 *Magnetic resonance angiography, head; without contrast material(s)* (work RVU= 1.20, pre-service time of 5 minutes, intra-service time of 12 minutes, and post-service time of 5 minutes), and noted that both services require similar intra-service and total times, further justifying a work value of 1.16 for the survey code. **The RUC recommends a work RVU of 1.16 for CPT code 73701.**

73702 Computed tomography, lower extremity; without contrast material, followed by contrast material(s) and further sections

The RUC reviewed the survey results from 55 physicians and agreed with the following physician time components: pre-service time of 5 minutes, intra-service time of 16 minutes and post-service time of 5 minutes, for a combined total of 26 minutes. The previous valuation and times for this code were from CMS or another unknown source and should not be compared to the current survey times. The RUC determined that a work RVU of 1.22, which is the current work value and below the survey 25th percentile, appropriately accounts for the physician work involved to perform this service. To justify the work RVU of 1.22, the RUC reviewed the survey code to MPC code 70470 *Computed tomography, head or brain; without contrast material, followed by contrast material(s) and further sections* (work RVU= 1.27, pre-service time of 5 minutes, intra-service time of 15 minutes, and post-service time of 5 minutes), and noted that both services require identical pre and post-service times and similar intra-service times.

To further justify a work RVU of 1.22, the RUC reviewed code 78071 *Parathyroid planar imaging (including subtraction, when performed); with tomographic (SPECT)* (work RVU= 1.20, pre-service time of 5 minutes, intra-service time of 15 minutes, and post-service time of 5 minutes), and noted that the survey code is appropriately valued slightly higher than code 78071 because both services require identical pre and post-service times and similar intra-service times, further justifying a work value of 1.22 for the survey code. **The RUC recommends a work RVU of 1.22 for CPT code 73702.**

Practice Expense

The PE Subcommittee discussed that a heparin lock is no longer appropriate for imaging services and removed the supply item, heparin lock (SC012). The Subcommittee also made minor corrections to the equipment minutes. The RUC recommends the direct practice expense inputs as modified and approved by the Practice Expense Subcommittee.

X-Ray Exam Specimen (Tab 22)

Kurt Schoppe, MD (ACR); Daniel Wessell, MD (ACR); Lauren Golding, MD (ACR)

In October 2017, the Relativity Assessment Workgroup requested that AMA staff compile a list of CMS/Other codes with Medicare utilization of 30,000 or more. In January 2018, the RUC recommends to survey these services for April 2018.

Compelling Evidence

The specialty society presented compelling evidence for CPT code 76098 based on a flawed methodology with inadequate time assigned to the code under the CMS/Other value and a change in population due to the bundling with biopsy code 19081 in 2014, substantiating the increased time reflected in the survey. It is now typical for the survey code to be performed in patients undergoing lumpectomy, mastectomy, or surgical excision in the operating room. 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 20 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.

76098 Radiological examination, surgical specimen

The RUC reviewed the survey results from 49 physicians and agreed with the following physician time components: pre-service time of 7 minutes, intra-service time of 5 minutes, and immediate post-service time of 3 minutes, for a combined total of 15 minutes. The RUC noted that the survey code involves more pre-service time than other radiology codes due to the pre-service work which involves the review of clinical history; the review of initial diagnostic images and localization images obtained prior to surgery; and also the evaluation of the accuracy and method of localization and the type and number of needle biopsy clip marker(s), radioactive or other localizing seed(s), and/or localizing wire(s) expected to be present in the surgically excised tissue specimen. The RUC determined that an interim work RVU of 0.40, which is at the survey median, appropriately accounts for the physician work involved to perform this service. The RUC inquired whether this service is typically performed with a placement of localization device service (ie codes 19281-19288) on the same patient, same date of service and by the same provider, noting that any overlapping work that is typically performed with another service should be removed from the survey code. The specialty expert panel asserted that the survey code was typically performed alone — the RUC wanted to confirm this by reviewing the Medicare claims data. There are different localization device CPT codes for each imaging modality. As reviewing the relationship between a single code and multiple codes is a relatively more complex and nuanced scenario, the specialty requested and the RUC agreed that more time was necessary to properly summarize, QA and

interpret the data. The RUC agreed that AMA staff will research the current billed together data for this code and will be brought back at the October 2018 RUC meeting.

To justify the work RVU of 0.40, the RUC compared the survey code with MPC code 76857 *Ultrasound, pelvic (nonobstetric), real time with image documentation; limited or follow-up (eg, for follicles)* (work RVU= 0.50, pre-service time of 5 minutes, intra-service time of 7 minutes, immediate post-service time of 5 minutes, and total time of 17 minutes), and noted that both services require similar total times. Additionally, the RUC compared the survey code to reference code 17250 *Chemical cauterization of granulation tissue (ie, proud flesh)* (work RVU= 0.50, intra-service time of 5 minutes and total time of 17 minutes) and noted that both services have identical intra-service and total times, whereas with the reference code being a somewhat more intense service to perform, a somewhat lower valuation for the survey code is warranted. **The RUC recommends an interim work RVU of 0.40 for CPT code 76098.**

Practice Expense

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

3D Rendering (Tab 23)

Kurt Schoppe, MD (ACR); Daniel Wessell, MD (ACR); Andrew Moriarity, MD (ACR); Gregory Nicola, MD (ASNR); Melissa Chen, MD (ASNR)

The RUC identified services with a negative IWPUR and Medicare utilization over 10,000 for all services or over 1,000 for Harvard valued and CMS/Other source codes. CPT code 76376 was identified via this screen for review.

The specialty societies noted that CPT code 76377 *3D rendering with interpretation and reporting of computed tomography, magnetic resonance imaging, ultrasound, or other tomographic modality with image post-processing under concurrent supervision; requiring image post-processing on an independent workstation* was not surveyed for the April 2018 RUC meeting with 76376 for several reasons. CPT code 76376 is performed by technologists on the diagnostic workstation for a wide variety of clinical exams with the images subsequently interpreted by the radiologist to answer specific clinical questions at the request of the referring physician. CPT code 76377 is for technically demanding reconstructions typically performed by the radiologist on an independent workstation. These are much more involved data reconstructions on a few specific types of exams. The patient population undergoing CPT code 76376 is much different than the 76377 code. Additionally, the specialties noted that a 3D printing code is currently being drafted by a multispecialty group for submission to the CPT Editorial Panel. They noted their understanding that 76377 would be part of that family either for the CPT application or when the 3D printing code comes for valuation.

76376 3D rendering with interpretation and reporting of computed tomography, magnetic resonance imaging, ultrasound, or other tomographic modality with image postprocessing under concurrent supervision; not requiring image postprocessing on an independent workstation

The RUC reviewed the survey results from 57 radiologists and neuro-radiologists and agreed on the following physician time components: 3 minutes of pre-service time, 10 minutes of intra-service time and 4 minutes of post-service time.

The RUC reviewed the survey 25th percentile work RVU of 0.60 and agreed that this value overstates the amount of physician work involved. To determine an appropriate work RVU, the RUC compared the survey code to MPC code 88304 *Level III - Surgical pathology, gross and microscopic examination...* (work RVU = 0.22 and intra-service time 15 minutes) and noted that both services involve a similar amount of total time and a similar amount of physician work, and therefore should be valued similarly. The specialty society noted and the RUC agreed that this service is a relatively low intensity service

compared to other XXX global services with 10 minutes of intra-service time and that it would be appropriate to value this service at the low end of the spectrum of services with 10 minutes of intra-service time. Even though the intra-service time increased, the specialty societies noted and the RUC concurred that an increase in the value was not warranted and the work had not changed. The previous assignment of 5 minutes of intra-service time resulted in a negative IWPUT, signifying that the prior time was not in line with the current value. **The RUC recommends a work RVU of 0.20 for CPT code 76376.**

Practice Expense

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

Ultrasound Exam – Chest (Tab 24)

Kurt Schoppe, MD (ACR); Daniel Wessell, MD (ACR); Lauren Golding, MD (ACR)

In October 2017, the RAW requested that AMA staff compile a list of CMS/Other codes with Medicare utilization of 30,000 or more. In January 2018, the RUC recommends to survey these services for April 2018.

Compelling Evidence

The specialty society presented compelling evidence for CPT code 76604 based on a flawed methodology since the CMS/Other methodology for physician work and time is unknown. 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 20 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 compelling evidence based on the previously flawed methodology.

76604 Ultrasound, chest (includes mediastinum), real time with image documentation

The RUC reviewed the survey results from 33 physicians and agreed with the following physician time components: pre-service time of 4 minutes, intra-service time of 10 minutes, and immediate post-service time of 5 minutes, for a combined total of 19 minutes. The RUC determined that a work RVU of 0.59, which is the survey median, appropriately accounts for the physician work involved to perform this service. To justify the work RVU of 0.59, the RUC compared the survey code with the top key reference code 76705 *Ultrasound, abdominal, real time with image documentation; limited (eg, single organ, quadrant, follow-up)* (work RVU= 0.59, pre-service time of 5 minute, intra-service time of 8 minutes, immediate post-service time of 5 minute, and total time of 18 minutes), and noted that code 76705 requires the same physician work but is slightly less physician time to perform and appropriately is slightly more intense and complex as indicated by the survey respondents. Additionally, the RUC referenced code 93294 *Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional* (work RVU= 0.60, pre-service time of 5 minutes, intra-service time of 10 minutes, and immediate post-service time of 5 minutes, for a combined total of 20 minutes), and noted that the survey code should have a similar valuation because both codes require identical intra-service times and similar total times. **The RUC recommends a work RVU of 0.59 for CPT code 76604.**

Practice Expense

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

X-Ray Exam – Bone (Tab 25)

Kurt Schoppe, MD (ACR); Daniel Wessell, MD (ACR); Lauren Golding, MD (ACR); William Creevy, MD (AAOS); Hussein Elkousy, MD (AAOS)

In October 2017, the RAW requested that AMA staff compile a list of CMS/Other codes with Medicare utilization of 30,000 or more. CPT codes 77073, 77075 and 77077 were identified by this screen for review and codes 77074 and 77076 were included due to being part of the same code family.

Compelling Evidence

The specialty society presented compelling evidence for the X-Ray Exam – Bone code family, excluding CPT code 77076 which has been RUC reviewed (codes 77073-77075, 77077). The society noted that the prior methodology for valuing these codes is unknown. 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 20 years ago using an unknown methodology. The specialty society also noted that an increase in value for these codes is justified by the survey data, comparisons with the key reference services, and to maintain relativity within the family and other diagnostic imaging services. The RUC accepted that there is compelling evidence that CPT codes 77073-77075, 77077 were originally valued using an unknown and flawed methodology.

77073 Bone length studies (orthoroentgenogram, scanogram)

The RUC reviewed the survey results from 38 diagnostic radiologists and orthopedic surgeons and agreed on the following physician time components: 1 minute of pre-service time, 5 minutes of intra-service time and 1 minute of post-service time.

The RUC reviewed the survey 25th percentile work RVU of 0.26 and agreed that this value appropriately accounts for the physician work involved. To justify a work RVU of 0.26, the RUC compared the survey code to MPC code 72114 *Radiologic examination, spine, lumbosacral; complete, including bending views, minimum of 6 views* (work RVU= 0.26, intra-service time of 5 minutes, total time of 8 minutes) and noted that both services have identical intra-service time and that a value of 0.26 for the survey code would have appropriate rank order with the reference code given the complexity of evaluating the spine and the greater number of images reviewed for 72114. The RUC also compared the survey code to CPT code 71101 *Radiologic examination, ribs, unilateral; including posteroanterior chest, minimum of 3 views* (work RVU= 0.27, intra-service time of 5 minutes, total time of 7 minutes) and noted that both services have identical times and involve a similar amount of physician work. **The RUC recommends a work RVU of 0.26 for CPT code 77073.**

77074 Radiologic examination, osseous survey; limited (eg, for metastases)

The RUC reviewed the survey results from 31 diagnostic radiologists and agreed on the following physician time components: 3 minutes of pre-service time, 8 minutes of intra-service time and 2 minutes of post-service time. The specialties noted and the RUC agreed that the increase in pre-service and post-service time is warranted due to the typical patient who has multiple myeloma or some other type of cancer. During the pre-service, more time is necessary to review the reason for the examination, clinical history and prior relevant imaging studies (i.e., bone scans, CTs, PET scans). The additional post-service time pertains to the additional time to review the report for a 10 view study.

The RUC reviewed the survey 25th percentile work RVU of 0.44 and agreed that this value appropriately accounts for the physician work involved. The RUC compared the survey code to CPT code 92134 *Scanning computerized ophthalmic diagnostic imaging, posterior segment, with interpretation and report, unilateral or bilateral; retina* (work RVU= 0.45, intra-service time of 10 minutes, total time of 12 minutes) and noted that although the reference code has slightly more intra-service time, the survey code has more total time and is a more intense service to perform. When considering these factors and the

physician work involved in performing each service, the RUC agreed that both services should be valued similarly. The RUC also compared the survey code to CPT code 72084 *Radiologic examination, spine, entire thoracic and lumbar, including skull, cervical and sacral spine if performed (eg, scoliosis evaluation); minimum of 6 views* (work RVU= 0.41) and noted that both services have identical intra-service time and involve a similar intensity of physician work, though the survey code involves more total time to perform, supporting a somewhat higher valuation for the survey code. **The RUC recommends a work RVU of 0.44 for CPT code 77074.**

77075 Radiologic examination, osseous survey; complete (axial and appendicular skeleton)

The RUC reviewed the survey results from 41 diagnostic radiologists and agreed on the following physician time components: 3 minutes of pre-service time, 10 minutes of intra-service time and 2 minutes of post-service time. The specialties noted and the RUC agreed that the increase in pre-service and post-service time is warranted due to the typical patient who has multiple myeloma or some other type of cancer. During the pre-service, more time is necessary to review the reason for the examination, clinical history and prior relevant imaging studies (i.e., bone scans, CTs, PET scans). The additional post-service time pertains to the additional time to review the report for a 10 view study.

The RUC reviewed the survey 25th percentile work RVU of 0.55 and agreed that this value appropriately accounts for the physician work involved. To justify a work RVU of 0.55, the RUC compared the survey code to MPC code 76536 *Ultrasound, soft tissues of head and neck (eg, thyroid, parathyroid, parotid), real time with image documentation* (work RVU= 0.56, intra-service time of 10 minutes, total time of 18 minutes) and noted that both services have identical intra-service time and the slight variation in work RVU is justified by the small difference in pre- and post-service time between these two services. The RUC also compared the survey code to CPT code 76511 *Ophthalmic ultrasound, diagnostic; quantitative A-scan only* (work RVU= 0.64, intra-service time of 10 minutes, total time of 15 minutes) and noted that both services have identical times, and assigning a work RVU of 0.55 to the survey code would appropriately maintain rank order with the reference service. **The RUC recommends a work RVU of 0.55 for CPT code 77075.**

77076 Radiologic examination, osseous survey, infant

The RUC reviewed the survey results from 41 diagnostic radiologists and agreed on the following physician time components: 3 minutes of pre-service time, 10 minutes of intra-service time and 5 minutes of post-service time. The specialties noted and the RUC concurred that the longer post-service time in 77076 relative to the other services in the family is justified for two main reasons: the length of the report is much longer than other comparable radiographic exams due to the number of films (typically at least 20) and clinical context for the report, and it is typical for the radiologist to discuss the findings with the ordering providers at the time of interpretation as well as in later discussions for medicolegal purposes. The acuity of patients typically receiving 77076 is relatively high as it is typically performed on injured children suspected of being the victims of non-accidental trauma.

The RUC reviewed the survey 25th percentile work RVU of 0.75 and agreed that this value somewhat overstates the amount of physician work involved and would not have appropriate rank order with the other services in this code family. The RUC concurred with the specialties that the current value for this service of 0.70 would have appropriate rank order with the other services in this code family. To justify maintaining a work RVU of 0.70, the RUC compared the survey code to MPC code 99231 *Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least 2 of these 3 key components...* (work RVU= 0.76, intra-service time of 10 minutes, total time of 20 minutes) and noted that both services have identical intra-service time and intensity, whereas the reference code involves somewhat more total time, supporting a somewhat lower valuation for the survey code. The RUC also referenced CPT code 78580 *Pulmonary perfusion imaging (eg, particulate)* (work RVU= 0.74,

intra-service time of 10 minutes, total time of 20 minutes) as further support. **The RUC recommends a work RVU of 0.70 for CPT code 77076.**

77077 Joint survey, single view, 2 or more joints (specify)

The RUC reviewed the survey results from 30 diagnostic radiologists and agreed on the following physician time components: 2 minutes of pre-service time, 7 minutes of intra-service time and 2 minutes of post-service time.

The RUC reviewed the survey 25th percentile work RVU of 0.33 and agreed that this value appropriately accounts for the physician work involved. To justify a work RVU of 0.33, the RUC compared the survey code to MPC code 92081 *Visual field examination, unilateral or bilateral, with interpretation and report; limited examination (eg, tangent screen, Autoplot, arc perimeter, or single stimulus level automated test, such as Octopus 3 or 7 equivalent)* (work RVU= 0.30, intra-service time of 7 minutes, total time of 10 minutes) and noted that both services have identical intra-service time, while the survey code involves slightly more total time, justifying a slightly higher valuation. The RUC also referenced CPT code 71111 *Radiologic examination, ribs, bilateral; including posteroanterior chest, minimum of 4 views* (work RVU= 0.32, intra-service time of 7 minutes, total time of 9 minutes) for additional support. **The RUC recommends a work RVU of 0.33 for CPT code 77077.**

Practice Expense

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

Cytopathology, Cervical/ Vaginal (Tab 26)

Stephen Black-Schaffer, MD, FCAP (CAP); Swati Mehrotra, MD, FCAP (CAP); Roger McLendon, MD, FCAP (CAP)

In October 2017, the Relativity Assessment Workgroup requested that AMA staff compile a list of CMS/Other codes with Medicare utilization of 30,000 or more. CPT codes 88141 and G0124 were identified in this list and CPT codes G0141 and P3001 were added as part of the family. In January 2018, the RUC recommended to survey these services for April 2018. When CMS created the G-codes and P-code they did so to “track differences in pap smear technology”, as well as track the utilization of the different methodologies. CMS believed that although they are different methodologies they require the same amounts of work, and as a result, the codes were allocated the same work and practice expense value as 88141 (Federal Register/p. 59408, Vol 64., No. 211/ Tuesday, November 2, 1999). Most pap smears are performed by the cytotechnologist and paid through the clinical laboratory fee schedule. Only tests that are identified as abnormal are brought to the attention of the cytopathologist and utilize these services paid through the physician fee schedule. Because these are the abnormal cases, with significant health and testing implications, as well as heavy regulation, the intensity and complexity of performing the services is high. Additionally, although many pathology services have a grossing component, there is no grossing component for pap smears.

88141 Cytopathology, cervical or vaginal (any reporting system), requiring interpretation by physician

The RUC reviewed the survey results from 52 pathologists and determined that the current work RVU of 0.42 appropriately accounts for the work required to perform this service. As with several pathology services, there is no pre-service or post-service physician work involved in these services. The RUC recommends 10 minutes intra-service time. The RUC agreed with the specialty society that although the survey results indicate higher work values, the survey 25th percentile of 0.56 is somewhat higher than expected for the surveyed intra-service time of 10 minutes. The specialty concluded and the RUC agreed that although the time of 10 minutes is low, maintaining the current value is appropriate as these services have high intensity and complexity.

The RUC compared the work of the surveyed code to CPT code 92134 *Scanning computerized ophthalmic diagnostic imaging, posterior segment, with interpretation and report, unilateral or bilateral*; (work RVU = 0.45 and intra-service time of 10 minutes), noting the codes both have similar intra-service time and intensity. The RUC also compared the survey code to MPC codes 92250 *Fundus photography with interpretation and report* (work RVU 0.40, intra-service time of 11 minutes) and 92083 *Visual field examination, unilateral or bilateral, with interpretation and report; extended examination (eg, Goldmann visual fields with at least 3 isopters plotted and static determination within the central 30 deg, or quantitative, automated threshold perimetry, Octopus program G-1, 32 or 42, Humphrey visual field analyzer full threshold programs 30-2, 24-2, or 30/60-2)* (work RVU 0.50, intra-service time 10 minutes), noting that the survey code is appropriately positioned between these codes. Furthermore, the RUC compared the survey code to CPT code 72084 *Radiologic examination, spine, entire thoracic and lumbar, including skull, cervical and sacral spine if performed (eg, scoliosis evaluation); minimum of 6 views* (work RVU = 0.41, intra-service time of 8 minutes, total time of 10 minutes), the comparator code has slightly less intra-service time justifying the slightly lower work value. In addition, the RUC compared the survey code to 2nd key reference service, 88112 *Cytopathology, selective cellular enhancement technique with interpretation (eg, liquid based slide preparation method), except cervical or vaginal* (work RVU = 0.56, intra-service time of 15 minutes), noting that the reference code has 15 minutes of intra-service time justifying the higher work value and CPT code 88388 *Macroscopic examination, dissection, and preparation of tissue for non-microscopic analytical studies (eg, nucleic acid-based molecular studies); in conjunction with a touch imprint, intraoperative consultation, or frozen section, each tissue preparation (eg, a single lymph node) (List separately in addition to code for primary procedure)* (work RVU = 0.45 and 12 minutes intra-service time). **The RUC recommends a work RVU of 0.42 for CPT code 88141.**

G0124 Screening cytopathology, cervical or vaginal (any reporting system), collected in preservative fluid, automated thin layer preparation, requiring interpretation by physician

The RUC reviewed the survey results from 47 pathologists and determined that the current work RVU of 0.42 appropriately accounts for the work required to perform this service. As with several pathology services, there is no pre-service or post-service physician work involved in these service. The RUC recommends 10 minutes intra-service time. The RUC agreed with the specialty society that although the survey results indicate higher work values, the survey 25th percentile of 0.56 is somewhat higher than expected for the surveyed intra-service time of 10 minutes. The specialty concluded and the RUC agreed that although the time of 10 minutes is low, maintaining the current value is appropriate as these services have high intensity and complexity.

The RUC compared the work of the surveyed code to CPT code 92134 *Scanning computerized ophthalmic diagnostic imaging, posterior segment, with interpretation and report, unilateral or bilateral*; (work RVU = 0.45 and intra-service time of 10 minutes), noting the codes both have similar intra-service time and intensity. The RUC also compared the survey code to MPC codes 92250 *Fundus photography with interpretation and report* (work RVU 0.40, intra-service time of 11 minutes) and 92083 *Visual field examination, unilateral or bilateral, with interpretation and report; extended examination (eg, Goldmann visual fields with at least 3 isopters plotted and static determination within the central 30 deg, or quantitative, automated threshold perimetry, Octopus program G-1, 32 or 42, Humphrey visual field analyzer full threshold programs 30-2, 24-2, or 30/60-2)* (work RVU 0.50, intra-service time 10 minutes), noting that the survey code is appropriately positioned between these codes. Furthermore, the RUC compared the survey code to CPT code 72084 *Radiologic examination, spine, entire thoracic and lumbar, including skull, cervical and sacral spine if performed (eg, scoliosis evaluation); minimum of 6 views* (work RVU = 0.41, intra-service time of 8 minutes, total time of 10 minutes), the comparator code has slightly less intra-service time justifying the slightly lower work value. In addition, the RUC compared the survey code to 2nd key reference service, 88112 *Cytopathology, selective cellular enhancement technique with interpretation (eg, liquid based slide preparation method), except cervical or vaginal* (work RVU =

0.56, intra-service time of 15 minutes), noting that the reference code has 15 minutes of intra-service time justifying the higher work value and CPT code 88388 *Macroscopic examination, dissection, and preparation of tissue for non-microscopic analytical studies (eg, nucleic acid-based molecular studies); in conjunction with a touch imprint, intraoperative consultation, or frozen section, each tissue preparation (eg, a single lymph node) (List separately in addition to code for primary procedure)* (work RVU = 0.45 and 12 minutes intra-service time). **The RUC recommends a work RVU of 0.42 for HCPCS code G0124.**

G0141 Screening cytopathology smears, cervical or vaginal, performed by automated system, with manual rescreening, requiring interpretation by physician

The RUC reviewed the survey results from 36 pathologists and determined that the current work RVU of 0.42 appropriately accounts for the work required to perform this service. As with several pathology services, there is no pre-service or post-service physician work involved in these service. The RUC recommends 10 minutes intra-service time. The RUC agreed with the specialty society that although the survey results indicate higher work values, the survey 25th percentile of 0.56 is somewhat higher than expected for the surveyed intra-service time of 10 minutes. The specialty concluded and the RUC agreed that although the time of 10 minutes is low, maintaining the current value is appropriate as these services have high intensity and complexity.

The RUC compared the work of the surveyed code to CPT code 92134 *Scanning computerized ophthalmic diagnostic imaging, posterior segment, with interpretation and report, unilateral or bilateral;* (work RVU = 0.45 and intra-service time of 10 minutes), noting the codes both have similar intra-service time and intensity. The RUC also compared the survey code to MPC codes 92250 *Fundus photography with interpretation and report* (work RVU 0.40, intra-service time of 11 minutes) and 92083 *Visual field examination, unilateral or bilateral, with interpretation and report; extended examination (eg, Goldmann visual fields with at least 3 isopters plotted and static determination within the central 30 deg, or quantitative, automated threshold perimetry, Octopus program G-1, 32 or 42, Humphrey visual field analyzer full threshold programs 30-2, 24-2, or 30/60-2)* (work RVU 0.50, intra-service time 10 minutes), noting that the survey code is appropriately positioned between these codes. Furthermore, the RUC compared the survey code to CPT code 72084 *Radiologic examination, spine, entire thoracic and lumbar, including skull, cervical and sacral spine if performed (eg, scoliosis evaluation); minimum of 6 views* (work RVU = 0.41, intra-service time of 8 minutes, total time of 10 minutes), the comparator code has slightly less intra-service time justifying the slightly lower work value. In addition, the RUC compared the survey code to 2nd key reference service, 88112 *Cytopathology, selective cellular enhancement technique with interpretation (eg, liquid based slide preparation method), except cervical or vaginal* (work RVU = 0.56, intra-service time of 15 minutes), noting that the reference code has 15 minutes of intra-service time justifying the higher work value and CPT code 88388 *Macroscopic examination, dissection, and preparation of tissue for non-microscopic analytical studies (eg, nucleic acid-based molecular studies); in conjunction with a touch imprint, intraoperative consultation, or frozen section, each tissue preparation (eg, a single lymph node) (List separately in addition to code for primary procedure)* (work RVU = 0.45 and 12 minutes intra-service time). **The RUC recommends a work RVU of 0.42 for HCPCS code G0141.**

P3001 Screening papanicolaou smear, cervical or vaginal, up to three smears, requiring interpretation by physician

The RUC reviewed the survey results from 36 pathologists and determined that the current work RVU of 0.42 appropriately accounts for the work required to perform this service. As with several pathology services, there is no pre-service or post-service physician work involved in these service. The RUC recommends 12 minutes intra-service time. The RUC agreed with the specialty society that although the survey results indicate higher work values, the survey 25th percentile of 0.59 is somewhat higher than expected for the surveyed intra-service time of 12 minutes. The specialty explained that the only technical

difference for this service compared to the others is that the cells are applied directly to the slide and this service involves up to 3 slides prepared for fixation, staining and review. The specialty explained that because preparing additional slides for fixation, staining and review are repetitive steps there are more slides but only minimal additional work. This minimal additional work, done over more intra-service time makes the service less intense to perform.

The RUC compared the work of the surveyed code to CPT code 92134 *Scanning computerized ophthalmic diagnostic imaging, posterior segment, with interpretation and report, unilateral or bilateral*; (work RVU = 0.45 and intra-service time of 10 minutes), noting the codes both have similar intra-service time and intensity. The RUC also compared the survey code to MPC codes 92250 *Fundus photography with interpretation and report* (work RVU 0.40, intra-service time of 11 minutes) and 92083 *Visual field examination, unilateral or bilateral, with interpretation and report; extended examination (eg, Goldmann visual fields with at least 3 isopters plotted and static determination within the central 30 deg, or quantitative, automated threshold perimetry, Octopus program G-1, 32 or 42, Humphrey visual field analyzer full threshold programs 30-2, 24-2, or 30/60-2)* (work RVU 0.50, intra-service time 10 minutes), noting that the survey code is appropriately positioned between these codes. The RUC also compared the survey code to the 2nd key reference service, 88112 *Cytopathology, selective cellular enhancement technique with interpretation (eg, liquid based slide preparation method), except cervical or vaginal* (work RVU = 0.56, intra-service time of 15 minutes), noting that the reference code has 15 minutes of intra-service time justifying the higher work value. Additionally, the RUC compared the survey code to CPT code 88388 *Macroscopic examination, dissection, and preparation of tissue for non-microscopic analytical studies (eg, nucleic acid-based molecular studies); in conjunction with a touch imprint, intraoperative consultation, or frozen section, each tissue preparation (eg, a single lymph node) (List separately in addition to code for primary procedure)* (work RVU = 0.45 and 12 minutes intra-service time), noting the greater intensity of the reference code and CPT code 88314 *Special stain including interpretation and report; histochemical stain on frozen tissue block (List separately in addition to code for primary procedure)* (work RVU = 0.45 and 13 minutes intra-service time), noting that the slightly higher intra-service time justifies the slightly higher work value. **The RUC recommends a work RVU of 0.42 HCPCS code P3001.**

Practice Expense

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

Biofeedback Training (Tab 27)

Kyle Richards, MD (AUA); Drew Peterson, MD (AUA); Thomas Turk, MD (AUA); George Hill, MD (ACOG); Mitch Schuster, MD (ACOG)

The RUC identified services with a negative IWP/UT and Medicare utilization over 10,000 for all services or over 1,000 for Harvard valued and CMS/Other source codes. CPT code 90911 was identified by this screen for review.

At the April 2018 meeting, the specialty societies requested for the RUC to support their decision to refer this service to the CPT Editorial Panel for revision. The specialty societies noted that when CPT code 90911 was initially reviewed by the RUC in 1995, several new devices had been invented to teach patients how to effectively contract their pelvic muscles. A survey at that time resulted in an intra-service time of 60 minutes. Since then, biofeedback for pelvic floor weakness has evolved. Different patients need disparate amounts of time for each session. Initial sessions may indeed take longer, however follow-up sessions are typically shorter. The specialty societies explained to the RUC their plan to submit a CPT code change application to propose for CPT code 90911 to be made a time-based code consisting of 15 minutes increments, the same as the other physical therapy training codes (examples of other services provided were CPT codes 97110, 97140, 97112, 97530, 97032 and 97116). The specialty societies noted

their intent to submit a new coding proposal for consideration at the September 2018 CPT Editorial Panel meeting for *CPT 2020* and explained their plan to recommend that a maximum of 4 units be billed on the same day with clear documentation of the time in the medical record. **The RUC recommends CPT code 90911 be referred to CPT.**

Lung Function Test (Tab 28)

Katina Nicolacakis, MD (ATS); Robert DeMarco, MD (CHEST); Kevin Kovitz, MD (CHEST); Alan Plummer, MD (ATS); Omar Hussain, MD (ATS)

Facilitation Committee #1

In October 2017, the Relativity Assessment Workgroup requested that AMA staff compile a list of CMS/Other codes with Medicare utilization of 30,000 or more. In January 2018, the RUC recommended to survey this service for April 2018.

The RUC reviewed the survey results from 33 pulmonologists and determined that the specialty societies' recommendation of 0.10 work RVUs, the survey 25th percentile, somewhat overvalues the work involved in performing this service given the survey intra-service time of 5 minutes. The RUC recommends a crosswalk to CPT code 95905 *Motor and/or sensory nerve conduction, using preconfigured electrode array(s), amplitude and latency/velocity study, each limb, includes F-wave study when performed, with interpretation and report* (work RVU= 0.05, intra-service and total time of 5 minutes). The crosswalk code requires similar physician work as it involves comparing waveforms and the survey code involves comparing data points. The RUC recommends 5 minutes intra-service time and 1 minute post-service time. The RUC discussed that the service is typically reported with an Evaluation and Management (E/M) service and another pulmonary function test, and noted that the recommended times would appropriately account for any overlap with other services. The intra-service time involves reading and interpreting the test to determine if a significant interval change has occurred and then generating a report, which supports the 5 minutes of physician work indicated in the survey. The RUC did not agree that communication of the report required an additional 2 minutes of physician time over the post-service time included in the other services reported on the same day. The RUC reduced the post-service time from 2 minutes to 1 minute because the service requires minimal time to enter the results into the medical record and communicate the results to the patient and the referring physician.

The RUC compared the survey code to CPT codes 92285 *External ocular photography with interpretation and report for documentation of medical progress (eg, close-up photography, slit lamp photography, gonioscopy, stereo-photography)* (work RVU=0.05, intra-service and total time of 5 minutes), noting that the services have identical intra-service time, involve the same amount of physician work and should be valued identically. The RUC also compared the surveyed code to 95144 *Professional services for the supervision of preparation and provision of antigens for allergen immunotherapy, single dose vial(s) (specify number of vials)* (work RVU=0.06, intra-service time of 3 minutes), however the RUC noted that the reference code is not an appropriate crosswalk as it has less intra-service time and is a very different type of testing that is often reported in multiple units. **The RUC recommends a work RVU of 0.05 for CPT code 94200.**

Practice Expense

The RUC verified that any overlap in the clinical activities has been removed because the service is typically reported with an E/M service and another pulmonary function test on the same day. The RUC reviewed and approved the practice expense inputs with minor modifications as recommended by the PE Subcommittee.

Work Neutrality

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

Do Not Use as a Comparator

CPT code 94200 will be labeled in the RUC database with a flag that it should not to be used as a comparator for future valuations.

Emergency Department Visits (Tab 29)

Ethan Booker, MD (ACEP); Jordan Celeste, MD (ACEP) and Steven Krug, MD (AAP)

Facilitation Committee #3

CMS stated that they have received information suggesting that the work RVUs for emergency department visits may not appropriately reflect the full resources involved in furnishing these services. CMS finalized its proposal to proceed with the review of CPT codes 99281-99285, therefore the RUC added them to the list of potentially misvalued services for review April 2018.

Compelling Evidence

The specialty societies indicated and the RUC agreed that there is compelling evidence that there has been a change in physician work due to a change in the patient population and an anomalous relationship exists with 99281-99283 based in the previous valuation crosswalk.

1) *Change in physician work due to change in the patient population*

The specialty societies submitted peer-reviewed medical literature (as outlined in the summary of recommendation form), that the 2013 RAND Health "The Evolving Role of Emergency Departments in the United States" report demonstrated an increase number of Emergency Department (ED) visits, no increase in the rate of admission, increased intensity of ED evaluation and management and an increase in the time that patients spent in the ED by more than 20%.

The work of emergency department evaluation and management has changed significantly over the past 10 years, requiring greater cognitive work and creating higher levels of stress and risk for emergency physicians as they now make the majority of hospital admission decisions in the US. Peer reviewed literature, large databases including Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC) and Agency for Healthcare Research and Quality (AHRQ) data and clinical guidelines changing management from hospital based to outpatient describe some elements of this change. The ED patient population has a higher burden of comorbid conditions including: behavioral health and substance abuse, a higher percentage of patients presenting for higher complexity and less discrete complaints such as chest pain, abdominal pain and shortness of breath — simple injury is increasingly cared for elsewhere. Studies identify multiple areas of increased intensity of services in diagnosis and treatment, resulting in longer, more complex ED evaluations, and patients who were previously hospitalized being discharged home. This is demonstrated by no increase in the overall rate of hospital admission, greater numbers of diagnostic tests and interventions and a higher rate of ICU admissions.

2) *Anomalous relationship*

The specialty society indicated and the RUC agreed that in the First Five-Year Review (1995) and the Third-Five Year Review (2005), the RUC crosswalked CPT codes 99281, 99282 and 99283 to *Office or other outpatient visit for the evaluation and management of a new patient*, CPT codes 99201, 99202 and 99203. However, in 2010 CMS slightly increased the E/M office visits after the Agency determined it would no longer cover the consultation codes. CPT codes 99281-99283 were not adjusted at that time, therefore resulting in an inconsistent relationship.

99281 Emergency department visit; straightforward decision making/self-limited or minor severity

The RUC reviewed the survey results from 132 emergency medicine physicians and pediatricians and determined that the survey 25th percentile work RVU of 0.48 appropriately accounts for the work required to perform this service. The RUC recommends 2 minutes pre-service evaluation time, 8 minutes intra-service time and 5 minutes post-service time. The RUC noted that this now directly crosswalks to the physician work of key reference service CPT code 99201 *Office or other outpatient visit for the evaluation and management of a new patient; straightforward decision making/self-limited or minor severity* (work RVU = 0.48) as previously established. The RUC noted that this value is also supported by the second key reference service 99212 *Office or other outpatient visit for the evaluation and management of an established patient; straightforward decision making/self-limited or minor severity* (work RVU = 0.48), with the same amount of physician work. The RUC indicated that the total time for 99201 and 99212 is slightly higher, 2 minutes and 1 minute respectively, which reflects the slightly higher intensity and complexity of CPT code 99281 as indicated by the survey respondents. **The RUC recommends a work RVU of 0.48 for CPT code 99281.**

99282 Emergency department visit; low complexity/low to moderate severity

The RUC reviewed the survey results from 132 emergency medicine physicians and pediatricians and determined that the survey 25th percentile work RVU of 0.93 appropriately accounts for the work required to perform this service. The RUC recommends 3 minutes pre-service evaluation time, 10 minutes intra-service time and 6 minutes post-service time. The RUC noted that this now directly crosswalks to the physician work of key reference service CPT code 99202 *Office or other outpatient visit for the evaluation and management of a new patient; straightforward decision making/low to moderate severity* (work RVU = 0.93) as previously established. For additional support, the RUC referenced MPC codes 36440 *Push transfusion, blood, 2 years or younger* (work RVU = 1.03) and 43760 *Change of gastrostomy tube, percutaneous, without imaging or endoscopic guidance* (work RVU = 0.90), which require similar work and more physician time, which appropriately reflects the higher intensity of CPT code 99282. **The RUC recommends a work RVU of 0.93 for CPT code 99282.**

99283 Emergency department visit; moderate complexity/ moderate severity

The RUC reviewed the survey results from 138 emergency medicine physicians and pediatricians and a direct crosswalk to the key reference code CPT code 99203 *Office or other outpatient visit for the evaluation and management of a new patient; low complexity moderate severity* (work RVU = 1.42), which is lower than the survey 25th percentile work RVU of 1.50 maintains the relativity of this service. The RUC noted that this reestablishes the same crosswalk from the previous valuation. The RUC recommends 5 minutes pre-service evaluation time, 15 minutes intra-service time and 10 minutes post-service time. The physician time for 99283 is lower than the key reference service 99203, which reflects the higher intensity and complexity of 99283 as indicated by the survey respondents. For additional support, the RUC referenced MPC codes 12004 *Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk and/or extremities (including hands and feet); 7.6 cm to 12.5 cm* (work RVU = 1.44) and 99232 *Subsequent hospital care, per day, for the evaluation and management of a patient* (work RVU = 1.39), which require similar work and more physician time, which appropriately reflects the higher intensity of CPT code 99283. **The RUC recommends a work RVU of 1.42 for CPT code 99283.**

99284 Emergency department visit; moderate complexity/high severity

The RUC reviewed the survey results from 139 emergency medicine physicians and pediatricians and determined that the survey 25th percentile work RVU of 2.60 appropriately accounts for the work required to perform this service. The RUC recommends 6 minutes pre-time, 22 minutes intra-service time and 12 minutes post-time. The RUC noted the intra-service time for 99284 decreased by 2 minutes, but the total time remained the same at 40 minutes. Due to the increased intensity and complexity of this service, a slight increase to the work RVU is accurate. The RUC compared CPT code 99284 to key reference

service 99204 *Office or other outpatient visit for the evaluation and management of a new patient; moderate complexity/moderate to high severity* (work RVU = 2.43, intra-service time 30 minutes and total time 45 minutes) noting the physician time for 99284 is lower but the physician work, intensity and complexity are higher than 99204 as indicated by the survey respondents (88% respondents who chose 99204 as the key reference service indicated that 99284 is overall more intense and complex than 99204). For additional support, the RUC referenced MPC code 31500 *Intubation, endotracheal, emergency procedure* (work RVU = 3.00 and total time 32 minutes) noting that CPT code 31500 requires more physician work and is a very intense procedure compared to 99284, thus valued appropriately. **The RUC recommends a work RVU of 2.60 for CPT code 99284.**

99285 Emergency department visit; high complexity/high severity

The RUC reviewed the survey results from 137 emergency medicine physicians and pediatricians and determined that the current value, which is the survey 25th percentile, work RVU of 3.80 appropriately accounts for the work required to perform this service. The RUC recommends 9 minutes pre-time, 30 minutes intra-service time and 16 minutes post-time. The RUC noted the total time for 99285 decreased by 8 minutes, however, due to the increased intensity and complexity of this service, maintaining the work RVU is accurate. The RUC compared CPT code 99285 to key reference service 99236 *Observation or inpatient hospital care, for the evaluation and management* (work RVU = 4.20, intra-service time 55 minutes and total time 94 minutes) noting the physician time for 99285 is lower but the physician work, intensity and complexity are higher than 99236 as indicated by the survey respondents (84% respondents whose chose 99236 as the key reference service indicated that 99285 is overall more intense and complex than 99236). The RUC also compared the surveyed code to the second key reference service 99205 *Office or other outpatient visit for the evaluation and management of a new patient* (work RVU = 3.17) and agreed that this places 99285 in the proper relativity as it requires more physician work and is more intense and complex as indicated by the survey respondents. **The RUC recommends a work RVU of 3.80 for CPT code 99285.**

XII. Practice Expense Subcommittee (Tab 30)

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

- **Scope Equipment Reorganization Workgroup**

The reconvened Scope Reorganization Workgroup met via conference call on February 28, 2018 and March 20, 2018 to provide CMS with a conceptual framework, outlining how to reorganize the broad variety of scope equipment.

The Workgroup developed a matrix to show the type of scope used for each type of endoscopy, as well as the more specific CPT codes for the services that utilize the scope equipment. CMS indicated that the Workgroup product was helpful and they will respond to the Workgroup's recommendations in the NPRM for 2020.

- **Obtain Vital Signs Clinical Activity Time Standard**

In the CY 2018 NPRM, CMS proposed to change the standard for obtain vital signs to 5 minutes, rather than a range based on the number of vital signs taken of 0, 3 or 5 minutes as is the current PE Subcommittee standard. The Agency explained that this proposal was based on what they have noted as an upward trend in the recommended time associated with the clinical activity; *obtain vital signs*, based on height and weight becoming typical vital signs. In the CY 2018 Final Rule, CMS assigned 5 minutes of clinical staff time for all codes that include the clinical activity

were at least 1 minute of clinical staff time was previously assigned. CMS applied the increase historically so not to advantage recently reviewed services.

RUC staff conducted an analysis where the data indicated that 3 minutes of clinical staff time to obtain vital signs is typical for CPT 2017 and 2018. The PE Subcommittee will maintain the standard for clinical activity, *obtains vital signs*, at 0, 3 or 5 minutes based on the number of vital signs taken.

The Practice Expense Subcommittee will take the following steps in order to address the change from 3 minutes to 5 minutes to obtain vital signs for a large amount of codes:

- Add a question to the PE SOR regarding the past staff time recommendation for clinical activity, *obtains vital signs*, and the rationale for the current recommendation.
 - Specialty societies will be instructed to include the clinical staff time for clinical activity, *obtains vital signs* from the original recommendation submitted to CMS in the reference code(s) rather than 5 minutes reflecting the RUC database (based on CMS approved direct PE inputs).
 - The PE Subcommittee will maintain the standard for clinical activity, *obtains vital signs*, at 0, 3 or 5 minutes based on the number of vital signs taken.
- **Exam Table Included in Services Performed in an Ultrasound Room**

At the January 2018 RUC meeting the Practice Expense Subcommittee questioned if an exam table should ever be allocated to services performed in an ultrasound room. The ultrasound room includes an ultrasound table; however an exam table may be used in addition, or for recovery. The Practice Expense Subcommittee requested that staff conduct an analysis to find any services that included both an exam table and an ultrasound room. The data will help the Subcommittee to determine if the table is duplicative. Staff conducted the analysis and found that there are no CPT codes that are allocated both an *ultrasound room* (EL015) and an *exam table* (EF023). The Practice Expense Subcommittee agreed that no further action on this issue is necessary.
 - **Power Table Workgroup**

At the April 2018 Practice Expense Subcommittee meeting there was extensive discussion of the use of the power table (EF031) versus the exam table (EF023). Generally the type of table allocated to the direct practice expense for a service is based on the dominant specialty and often the surgical specialties are allocated a power table and the non-surgical specialties are allocated an exam table. The PE Subcommittee will convene a Workgroup to analyze the issue and determine whether or not a different approach is appropriate.
 - **Computed Radiography (CR) and Digital Radiography (DR) Imaging Services.**

On December 18, 2015, President Obama signed into law the Consolidated Appropriations Act of 2016. Within this extensive legislation were radiology provisions related to the reimbursement for analog radiography (film), computed radiography (CR), and digital radiography (DR) imaging services. This legislation imposes a 20% reduction on payment for imaging services using film and a 7% reduction on imaging services using CR in order to provide an incentive for the adoption of DR imaging. The PE Subcommittee is concerned with this policy as most imaging services recommendations are based on the direct practice expense inputs for CR imaging, which remains the typical way to provide the service. In order to better understand the implications of the legislation on MPFS payment and to determine if there is any appropriate action on the part of the RUC, staff will develop informational materials for the PE Subcommittee's review for discussion at the October 2018 RUC meeting.

- **Invoice Process**

During the Scope Equipment Reorganization Workgroup report the PE Subcommittee discussed concerns about the difficulty of obtaining paid invoices to submit to CMS for their reference in creating pricing for supplies and equipment. There has been extensive discussion of this issue throughout the history of the RBRVS. In order to better understand past RUC recommendations and comments regarding providing paid invoices to CMS, RUC staff will develop informational materials on alternative databases. The PE Subcommittee also encourages specialty societies to continue to work at obtaining paid invoices for supplies and equipment that can be submitted to CMS.

- A RUC member asked if scope cleaning equipment was discussed as part of the Scope Equipment Reorganization Workgroup. The Chair of the Workgroup explained that the issue was discussed along with the development of disposable scopes, but that the two issues were outside of the purview of the group.

The RUC approved the Practice Expense Subcommittee Report.

XIII. Administrative Subcommittee (Tab 31)

Doctor Walter Larimore, Chair, provided the Administrative Subcommittee report:

- **RUC Appeals Process**

Doctor Larimore indicated that at the January 2018 RUC meeting under New Business, the HCPAC Co-Chair requested that the RUC review the language on the appeals process to provide more definitive criteria. AMA staff worked with the AMA Office of General Counsel to better define the appeals process criteria. The revisions reflect language similar to that of the CPT Editorial Panel process as well as reorganized the sections regarding RUC member reconsiderations versus specialty societies' appeal of a RUC recommendation. These two concepts were merged under one section and now have been separated.

The Administrative Subcommittee noted that unlike the CPT process "new information" available after the RUC consideration may be an appropriate grounds for an appeal. The Subcommittee added to section III.C.2. "Compelling information relevant to the valuation has become available since the matter was considered by the RUC and such information would be directly relevant to the valuation" to the modifications.

The Subcommittee also modified III.D to change "in a timely manner" to "within fourteen (14) days".

The Administrative Subcommittee recommended the proposed AMA Office of General Counsel revisions to the RUC Rules and Procedures, with the above addition and amendment.

- **Conflict of Interest Compliance**

Doctor Larimore also noted that at the January 2018 RUC meeting under New Business, a RUC member asked for clarification on whether a RUC member serving on a multi-specialty or AMA Workgroup is precluded from speaking at the table. **The Administrative Subcommittee reviewed the current policies and affirmed that RUC members serving on a multi-specialty or AMA Workgroup are not conflicts of interest.**

The RUC approved the Administrative Subcommittee Report.

XIV. Research Subcommittee (Tab 32)

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

- **The Subcommittee reviewed and accepted the February 2018 Research Subcommittee report**

The Research Subcommittee report from the February 2018 conference call and separate electronic review included in Tab 32 of the April 2018 agenda materials was approved without modification.

- **Non-face-to-face Services Standard Survey Templates – Transitional Care Management**

At the January 2018 RUC meeting the specialties involved with the survey process for transitional care management (TCM) services submitted a letter requesting that “a Workgroup be appointed to develop new standardized survey instruments for non-face-to-face services, for both physicians and relevant clinical staff, in order to more accurately value these services”. In response, the Ad Hoc Non-Face-to-Face Services Survey Workgroup was formed with joint oversight by the Research Subcommittee and the PE Subcommittee. AMA staff worked with relevant specialty society staff to develop a draft standard survey instrument template specifically for transitional care management (TCM) services for the Workgroup to consider. Two separate survey templates were created, one for the physician/QHP and a separate one for the clinical staff. The Workgroup convened conference calls on March 14th, March 28th, as well as separate electronic review of the proposed templates. The specialties incorporated all Workgroup recommendations into the proposed templates and the Workgroup recommends the Research Subcommittee approve the two templates for use with TCM services.

The Workgroup agreed that it was appropriate for there to be separate survey templates for the provider and clinical staff. They also agreed that the templates to focus on all providers or clinical staff that jointly provides the service for an individual patient, instead of only the work and time of the individual taking the survey. Also, it was noted that these templates are only being considered for TCM specifically and a general survey for other non-face-to-face services will be developed in the future.

The Research Subcommittee approved the physician/QHP and the clinical staff templates as recommended by the Ad Hoc Non-Face-to-Face survey workgroup specifically for use with the TCM services. (*Templates included in Tab 32 agenda materials of the April 2018 RUC meeting*)

- **000-day Global Codes Typically Billed with E/M Services**

At the April 2017 RUC meeting, during *Other Business*, a RUC member requested that methodological issues related to procedure with 000-day global typically billed with E/M be referred to the Research Subcommittee. The RUC has identified codes that are typically reported with E/M on the same date to ensure that there is no duplication of pre and post work. The member requested review to ensure that there was greater standardization approach to pre and post work identified for the 000 day global procedures that are deemed to be above and beyond the E/M reported on that same date.

Per a Subcommittee request from the January meeting, AMA Staff has provide a table with 23 codes with a 000 day global period that are performed with E/M 75% of the time or more, along

with the pre-evaluation time for these services and noted that for services in the table reviewed before 2002, the total pre-service time was not broken out. **The Research Subcommittee reviewed the data and suggests for the RAW to create a potentially misvalued code screen for 000-day global services that are reported more than 75 percent of the time with E/M, that have more than 5 minutes of pre-service evaluation time, more than 10,000 Medicare utilization and have not been reviewed in past 5 years.** For 000-day global services that do not have pre-evaluation time broken out, then 5 minutes of total time should be reviewed.

Also, based on a prior Subcommittee request, AMA RUC staff separately provided draft survey language for global services to further emphasize the exclusion of time for evaluation otherwise included in the same-day E/M.

The Research Subcommittee approved for the following language to be added to the physician time question (question #2) of the standard 000-day, 010-day and 090-day global RUC survey instruments

Note: Do not include time for work related to another service, procedure, or evaluation and management code that is separately reportable.

- **Standard Survey Language Solutions for Time-Based Codes**

Following the June 2017 Research Subcommittee conference call, a member recommended that the Subcommittee discuss potential standard solutions for surveying time based codes. In the past, certain time based codes have had custom question pertaining to the typical number of units of the code and/or pertaining to the total time involved in performing the service added to the survey. Specialties have also employed custom disclaimer text throughout the survey templates and survey distribution emails. Bolding and underlying text has also been utilized.

At the October 2017 and January 2018 meetings, the Research Subcommittee noted that recently it has been somewhat common for the HCPAC to review time-based CPT Codes and that valuing these services has proven somewhat difficult. Currently, on a case by case basis, specialties have proposed custom survey language to capture the amount of time units a service typically takes. Members suggested having survey language options available to societies may simplify their efforts when clarifying their surveys. The Research Subcommittee requested for AMA Staff to assemble examples of language used in the past and also noted that they would continue discussing this issue at the April 2018 meeting.

At the April meeting, the Subcommittee reviewed proposed standard survey language for time-based codes, prepared by AMA staff and the Chair. These survey templates previously incorporated feedback provided by several HCPAC societies that have had a lot of experience surveying time-based codes in the recent past. **The Research Subcommittee approved the following standard survey language changes for time-based codes (for survey questions 2 and 6) in general though will have subsequent electronic review to incorporate additional edits received following the meeting:**

Question 2 (

How much of your own total time is required per patient treated for each of the following steps in patient care described by ONE UNIT of the survey code? It is important to be as precise as possible. For example, indicate 3 or 6 minutes instead of rounding to 5 minutes or indicate 14 or 17 minutes instead

of rounding to 15 minutes. Indicate your time for the survey code(s) below. Type in your answers (in minutes) in each box.

IMPORTANT: Some time-based codes may be reported in multiple units, but your time estimates below should only be for ONE UNIT of the code. If you typically report this service using multiple units, make sure to prorate the time per unit for the pre and post each time components of the service. (pre, intra and post). For example if you typically report this service using 3 units, divide your total pre time by 3, your total intra time by 3 and your total post service time by 3 to arrive at these time components for a single unit of the code.

ONE UNIT of Survey Code 1

Pre-service time _____ minutes

Intra-service time _____ minutes

Post-service time _____ minutes

ONE UNIT of Survey Code 2

Pre-service time _____ minutes

Intra-service time _____ minutes

Post-service time _____ minutes

Considering that some time-based codes may be reported in multiple units to describe an entire encounter, how many units of the code would you report for the typical encounter?

Typical Number of Units of Survey Code 1: [DROPDOWN BOX]

Typical Number of Units of Survey Code 2: [DROPDOWN BOX]

OPTION FOR CODES THAT ARE REPORTED BASE CODE/ADD-ON CODE(S) (mostly standard survey language):

**Question 2a –
xxx Global
Code(s)**

How much of your own time is required per patient treated for each of the following steps in patient care related to this **procedure service**? It is important to be as precise as possible. For example, indicate 3 or 6 minutes instead of rounding to 5 minutes or indicate 14 or 17 minutes instead of rounding to 15 minutes. Indicate your time for the survey **base** code(s) below. Type in your answers (in minutes) in each box.

ONE UNIT of Survey Code 1

Pre-service time _____ minutes

Intra-service time _____ minutes

Post-service time _____ minutes

**Question 2b
– ZZZ Add-on Code(s)**

How much of your own time is required per patient treated for each of the following steps in patient care related to this **procedure service**? It is important to be as precise as possible. For example, indicate 3 or 6 minutes instead of rounding to 5 minutes or indicate 14 or 17 minutes instead of rounding to 15 minutes. Indicate your time for the **add-on** survey code(s) below. Type in your answers (in minutes) in each box.

ONE UNIT of Survey Code 2

Intra-service time: _____ minutes

Considering that some time-based codes may be reported in multiple units to describe an entire encounter, how many units of the add-on code would you report for the typical encounter? Do not count the separate base code as part of your estimate below.

Typical Number of Units of Add-on Survey Code 2: [DROPDOWN BOX]

Question 6

Based on your review of all previous questions, please provide your estimate work RVU (to the 2nd decimal place) for the survey code. **For time-based codes that can be reported in multiple units, your work RVU estimate should only be for ONE UNIT of the code:**

For example, if **ONE UNIT of** the survey code involves the same amount of physician work as the reference service you choose, you would assign the same work RVU. If **ONE UNIT of** the survey code involves less work than the reference service you would estimate a work RVU that is less than the work RVU of the reference service and vice versa. This methodology attempts to set the work RVU of the survey service “relative” to the work RVU of comparable and established reference services. Please keep in mind the range of work RVUs in the reference service list when providing your estimate.

Estimate Work RVU for **ONE UNIT of** [Survey Code 1]: _____

Estimate Work RVU for **ONE UNIT of** [Survey Code 2]: _____

- **XXX global Pre-service and Post-service Periods**
During *Other Business* at the January 2018 RUC Meeting, a RUC member shared their observation that there are XXX codes with similar descriptions of pre and post-service work but very different time allotments. The RUC referred this item to the Research Subcommittee, requesting for the Subcommittee to examine pre and post-service times for XXX global codes, as well as to look at the range of work descriptors and the range of times assigned to determine if any action needs to be taken.

AMA staff performed an analysis of the pre-service and post-service times of all RUC-reviewed XXX global services (ex. anesthesia) (*summary data provided on page 2; more detailed summary data and raw data included in a separate excel workbook*). For the analysis, most codes were grouped by the light green header of their CPT section (ie Surgery / Cardiovascular (33010-37799)). For the *Diagnostic Radiology (Diagnostic Imaging)* header in the Radiology section (codes 70010-70559), codes were further subdivided by the modality listed at the beginning of the CPT descriptor. For example, if a descriptor simply began with “Computed Tomographic”, it

was assigned to the CT grouping. The Pathology and E/M sections of CPT were not drilled down to the header level; each section has over 20 headers and the majority of pathology XXX global services have zero minutes of pre and post-time.

The Subcommittee reviewed and discussed the provided analysis. **The Research Subcommittee agreed that the variation in pre and post-service times in general seemed appropriate and agreed that XXX global packages should not be created at this time.**

Separately, AMA staff also created two tables with all CPT codes that have either identical pre-service or post-service descriptions of work (DOW) but different respective pre-service or post-service times. There are 188 codes on the pre-service table and 195 codes on the post-service table.

During the review of this data, the Subcommittee noted that tasks described by identical DOW text often could describe varying lengths of time based on the context of the procedure and the typical patient (ie “review patient records...” could describe a wide range of time), it is unclear how to interpret this data. For example, the pre-service DOW “*Review the reason for the examination and any pertinent clinical history. Review any prior applicable plain film or imaging studies*” is applied to multiple modalities and services with differing typical patients.

- **RUC Service Performance Rate Question**

At the April RUC meeting, a RUC member proposed updating the survey instrument to inquire for low volume services whether survey respondents have performed the survey code in the past few years instead of only the past 12 months. They noted that knowing this additional information may be beneficial when a survey code has a median performance rate of zero for the past 12 months. This item was referred to the Research Subcommittee for consideration. **At the April 2018 meeting, the Research Subcommittee agreed to continue discussing this topic at the fall meeting and requested for AMA staff and the Chair to provide alternate language for consideration (ie “How many times have you performed this service in the last ___ years?”).**

- **Other Business**

- **Minutes from March 12, 2018 and April 10, 2018 Ad Hoc Pre/Post Time Package Workgroup Conference Calls (Informational)**

The Chair of the Time Package Workgroup provided a brief summary of the Workgroup’s recent meetings. On the March 12 call, the Workgroup requested for AMA staff to provide an in-depth analysis comparing pre-service survey times to RUC recommended survey times since the inception of the pre-time packages and split out by assigned preservice package. The detailed analysis performed by AMA RUC staff includes every surgical global code reviewed by the RUC since the pre-time packages were formed (1108 recommendations between CPT 2010-CPT 2019). It drills down to pre-time package, pre-time component and global. It compares the 25th, median and 75th times from the surveys and RUC-recommendations, as well as the standard package times.

Workgroup members noted that, on occasion, advisory committee members have noted their initial package selection the package was based solely on the survey times, instead of the attributes of the underlying patient procedure. It was noted that the RUC makes corrections for this during the pre-meeting review period and/or during the presentation. The Workgroup members noted that additional educational materials should be developed to correct this discrepancy. **The Workgroup recommended and the Research Subcommittee agrees for AMA staff to update the specialty society instructions to provide further instruction on**

package selection (ie. that packages are not a ceiling and that selection should be based on the attributes of the patient and procedure).

The Workgroup observed that there is a fair amount of variability in survey times and that instead of revising any of the current times, the RUC should just continue to actively recognize that each presenter has to justify if they are asking for something different from the standard package. The Workgroup noted that the current level of variability is appropriate and corresponds with the variability in distinct services.

The Research Subcommittee agreed with the Workgroup recommendation that the analysis shows the packages seem to be working as intended. The Research Subcommittee does not recommend changing the minutes for any of the current standard pre-service packages.

On the April 10th call, the Workgroup noted that it has not yet finished its work pertaining to non-facility post-time packages and would like to evaluate whether these packages are necessary and, if needed, create draft non-facility post-time packages to submit to the Research Subcommittee for consideration at the October 2018 meeting.

Following that call, AMA staff provided additional historical information on the post-time package workgroup's actions in April 2013. At the April 2013 Post-time Workgroup meeting, the Workgroup reviewed an analysis showing that the median post-time for services assigned pre-time package five was 5 minutes and the median post-time for services assigned pre-time package six was 8 minutes. At the time, that Workgroup considered the creation of two standard non-facility post-time packages of either 5 minutes for procedures without sedation/anesthesia care and 10 minutes for procedures with anesthesia/sedation care. After review of both immediate post time by pre service packages and global periods, the 2013 Workgroup determined to continue to assign post-time based on survey data for non-facility procedures without the development of packages. Below is an updated analysis of non-facility post-times; the median immediate post times for packages five and six are now 5 minutes and 10 minutes respectively. **The Research Subcommittee agreed to reaffirm its decision from 2013, which was to continue to assign post-time based on survey data for non-facility procedures without the development of packages.**

The RUC approved the Research Subcommittee Report.

XV. Relativity Assessment Workgroup (Tab 33)

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

Doctor Collins addressed the RUC regarding an issue that was identified at the previous meeting. When a service is identified via a screen but either fell off the screen based on new utilization or other information but the Workgroup identifies other issues with the service, is it now open and should the RAW address it? Doctor Collins noted that the Workgroup will review codes for any issues that are currently identified and will be charged to examine if there is an applicable new screen than can be developed incorporating the identified issue and applied to other codes based on that issue.

- **CMS/Other Source Utilization over 30,000 – Action Plan Review
*Muscle Testing (95831-95834)***

In January 2018, the Relativity Assessment Workgroup reviewed action plans for CMS/Other codes with Medicare utilization of 30,000 or more. While reviewing the action plan for CPT code 95831 *Muscle testing, manual (separate procedure) with report; extremity (excluding hand) or trunk*, the

Workgroup determined to defer review of this service and requested an action plan on how to address CPT codes 95831-95834.

In April 2018, AAN, AANEM, AAPM, AAPM&R, ACP and APTA submitted an action plan indicating that CPT codes 95831-95834 should be deleted. In reviewing the four codes, the specialty societies do not believe that there is an appropriate scenario for physicians to separately report manual muscle testing. Furthermore, the APTA has indicated that there are alternative evaluation codes physical therapists can report when they perform this service. The 2017 estimated Medicare utilization data showed that anesthesiologists were the dominant specialty 95831 and 95832. The ASA agreed that these services should be deleted. **The Workgroup recommends that CPT codes 95831-95834 be referred to CPT for deletion.**

- **Negative IWPUT**

- ***Health and Behavior Intervention (96154)***

- In October 2017, the RUC identified services with a negative IWPUT and Medicare utilization over 10,000 for all services or over 1,000 for Harvard valued and CMS/Other source codes. The specialty societies indicated and the RUC agreed that this service be surveyed for April 2018. Then the specialty societies requested to resubmit an action plan to the Relativity Assessment Workgroup to request that this service be maintained. The Workgroup noted that the post service time of 20 minutes for CPT code 96154 may be an error and need to be divided by the typical 4 units to be 5 minutes of intra-service time. However, this code has not been reviewed since 2001 and should be reviewed. At the meeting the Workgroup recommended to survey CPT code 96154 and the related family of codes for October 2018. After the Workgroup meeting the specialty society indicated that they wish to take this family of codes back to CPT for revision. **The Workgroup recommends CPT code 96154 be referred to CPT for revision.**

- **Work Neutrality (CPT 2016) – Action Plan Review**

- ***Intravascular Ultrasound (37252 & 37253)***

- Each year AMA staff reviews the utilization assumptions for work neutrality when the Medicare Utilization data for that year/cycle is available. Any code family that has an increase in work RVUs over 10% of what was estimated is reviewed by the RAW to determine what is occurring. Intravascular Ultrasound, CPT codes 37252 *Intravascular ultrasound (noncoronary vessel) during diagnostic evaluation and/or therapeutic intervention, including radiological supervision and interpretation; initial noncoronary vessel (List separately in addition to code for primary procedure)* and 37253 *Intravascular ultrasound (noncoronary vessel) during diagnostic evaluation and/or therapeutic intervention, including radiological supervision and interpretation; each additional noncoronary vessel (List separately in addition to code for primary procedure)* that were reviewed at the January 2015 meeting and assumed to be a savings is actually a 44% increase in work RVUs from the old codes in 2015 to 2016 and the utilization was double from that of the old codes. This is unusual since this was a code bundle and the work RVUs further decreased from old coding structure not even taking into account the radiological activities.

The Workgroup had a robust discussion regarding these services, noting that physician work is identical regardless whether the procedure is performed for a diagnostic or therapeutic indication. The Workgroup indicated that this is a process issue. The utilization of the bundling of these services was underestimated. **Therefore, the Workgroup recommends that these services be surveyed for October 2018, noting that there must be something driving the increased utilization.** The Workgroup indicated that the specialty societies should research why there was such an increase in the utilization (possible compelling evidence).

- **Review Modifier -51 Exempt List**

In January 2018, a Workgroup member suggested to review codes on the Modifier -51 *Multiple Procedures* exempt list to make sure there is no duplication on pre- and post- work related to the services it is typically reported. AMA Staff examined list of 25 codes from the CPT Modifier-51 Exempt list and identified seven (7) services with 2017 estimated Medicare utilization over 10,000 (CPT codes 17004, 31500, 36620, 93451, 93456, 93503 and 95992). **The Workgroup examined the data provided on the percentage reported alone, physician pre and intra time and determined that this is an appropriate screen. The Workgroup requests action plans for the October 2018 RAW meeting and for specialty societies to indicate whether these services should stay on the Modifier -51 exempt list.**

- **Contractor Priced with High Volume**

In January 2018, a RUC member suggested to review high volume contractor priced codes. AMA Staff identified five (5) contractor-priced Category I CPT codes that have 2017 estimated Medicare utilization over 10,000 (CPT codes 77522, 77523, 90868, 93299 and 95943). **The Workgroup determined that there are various reasons in which these codes have been recommended to be contractor priced and the specialty societies should submit action plans for the October 2018 meeting indicating whether these services should be reviewed for physician work/practice expense by the RUC.**

- **PE Screen – High Cost Supplies**

At the January 2018 RUC meeting, the Practice Expense (PE) Subcommittee discussed potential screens that would identify misvalued services and recommended a high cost supply items screen to the Relativity Assessment Workgroup (RAW). There are 58 supply items with a purchase price greater than \$500. The PE Subcommittee recommended that the RAW identify services that include supply items greater than \$500 and based upon utilization, dominant specialty and date of last review, determine whether or not there is reason for RUC review.

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

Inclusion of a high cost supply does not necessarily indicate that a service is potentially misvalued. Although the RUC has requested, CMS has not indicated that they will re-price high cost supply items every year.

The Relativity Assessment Workgroup determined that this is an appropriate screen, however did not have enough time to discuss this issue in detail. The Workgroup will defer this issue until the October 2018 meeting. The Workgroup noted it should identify CMS' process regarding the review of high priced supply items and how J codes are constructed in an effort to determine how to proceed with this screen.

- **Other Issues**

When reviewing the action plan for the health and behavior intervention code above the Workgroup indicated that there may be other timed codes reported in multiple units that may have excessive post time. **The Workgroup will review a list of codes reported in multiple units at the October 2018 to determine if this is an appropriate screen.**

The RUC approved the Relativity Assessment Workgroup Report.

XVI. Emerging CPT/RUC Issues Workgroup (Tab 34)

Steven Farmer, MD, Senior Advisor and Medical Officer at Center for Medicare and Medicaid Innovation, provided an update on the Bundled Payment for Care Improvement (BPCI) - Advanced Model, the New Direction RFI and the PTAC recommended models.

XVII. Anesthesia Workgroup (Tab 35)

Doctor Verdi DiSesa, Chair, provided the Anesthesia Workgroup report:

- **Review revised Anesthesia building block methodology assumptions for the 8 codes identified**

Doctor DiSesa noted that in January 2018, the Workgroup indicated that it supported the concept of devising a refined building block methodology which would be used to construct an anesthesia reference service list. Such a list would be useful in determining appropriate base units for all anesthesia services. The Workgroup requested that the ASA incorporate the suggestions of the Workgroup to refine the building block method and to apply this method for discussion at the April 2018 Workgroup meeting, to the same 8 anesthesia codes presented in January.

At this meeting, the Anesthesia Workgroup reviewed ASA's revised five-step building block methodology and an alternate non-base unit dependent methodology. The Workgroup had a robust discussion of each of the elements of the "version 3" non-base unit dependent methodology which eliminates the circularity of the logic of the previous building block approaches.

The Workgroup identified the following questions/issues for the Workgroup and specialty society to address for each step of the methodology. The Workgroup will have one or two conference calls prior to the October 2018 meeting to review progress and to address issues which may arise in the development and refinement of the new approach.

Step 1: Pre-Service Evaluation

1. Should the survey time be used with a fixed IWPUT (i.e., surgical pre-evaluation IWPUT = 0.0224)?; or
2. Should a crosswalk to new/established Evaluation and Management (E/M) services be used and should this be a blend? If an E/M crosswalk is used, should the total time or the intra time plus pre-service time be used?

Step 2: Equipment, Drug and Supply Preparation

1. Should the specialty society survey for this time and multiply by 0.0081 (scrub/dress/wait IWPUT)? If yes, the survey should be constructed specifically to request the time of the anesthesiologist performing these services.
2. Should pre-time packages be constructed to estimate the time for equipment supply and preparation? If yes, there will be a need for better justification to define the packages.

Step 3: Induction Period Procedure

1. Is the proposed 2 minutes of time at 0.0224 for patient assessment immediately prior to induction RVU acceptable?
2. Is an IWPUT of 0.125 (CPT code 34713) as intensity for the induction procedure acceptable?

3. Should the IWPUT be applied across all anesthesia codes or should there be a range of IWPUTs used?
4. Should this time be surveyed or should time packages be developed?

Step 4: Post- Induction Period Procedure Anesthesia (PIPPA)

Review PIPPA level descriptions and level intensities to determine if appropriate.

Step 5: Post Anesthesia Evaluation

1. Should the specialty society survey for the post anesthesia evaluation time and multiply by the immediate post-service time IWPUT (0.0224)?; or
2. Should a crosswalk to new/established E/M services be used and should this be a blend of more than one level of service? If an E/M crosswalk is used, should the total time, intra time or some other combination of time elements be used?

The Workgroup will have one or two conference calls prior to the October 2018 meeting to address these and any other issues which may arise in the refinement of this methodology. The intention is that this process will produce a new “version 3” building block methodology which would be appropriate to validate the current base units of codes to be considered for inclusion in a future anesthesia reference service list. The resulting RSL would be used for valuation of all other anesthesiology codes. Finally, the Workgroup will work with the specialty society to devise a process (likely to include one or more “screens”) to identify potentially misvalued anesthesia codes, the base unit values of which would be updated using the standard survey used for evaluation of anesthesia codes and employing the new RSL.

The RUC approved the Anesthesia Workgroup Report.

XVIII. Professional Liability Insurance Workgroup (Tab 36)

The Professional Liability Insurance Workgroup report from the March 2018 conference call and the RUC letter to CMS that had previously been approved was provided for the information of the RUC.

XIX. New Business/Other Issues (Tab 37)

- The RUC discussed the use of extant data. Members were reminded if any extant data sources are identified, there is a process in place to follow for approval.
- The Director provided a point of clarification regarding the CMS/Other Screen, RUC policy is that the current value is considered to be correct unless there is compelling evidence to prove otherwise. If the specialty believes the value is flawed, it can present compelling evidence using CMS/Other as a flawed/unknown methodology. However, just because it is CMS/Other does not mean that the value has to change, taken on a case by case basis.
- A RUC member discussed the recent update to the RUC database where the diagnostic code section recently switched from the top 5 ICD-9 code groups to the top 5 ICD-10 code groupings. The RUC member implored the RUC to be mindful of this evolving metric. The Chair noted that the RUC database has the same level of data aggregation for the ICD-10 data as it previously had for the ICD-9 data (aggregated by first 3 code digits) and therefore does not provide the level of granularity some may have expected with the switch. AMA Staff will evaluate whether any changes to the diagnostic code data are warranted for the 2019 version of the RUC Database.

The RUC adjourned at 2:00 p.m. on Saturday, April 28, 2018.