I. Welcome and Call to Order

Doctor Peter Smith called the meeting to order on Friday, October 7, 2016 at 9:10 am. The following RUC Members were in attendance:

<table>
<thead>
<tr>
<th>Peter K. Smith, MD</th>
<th>George Williams, MD</th>
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<tr>
<td>Allan Anderson, MD</td>
<td>Amr Abouleish, MD, MBA *</td>
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<td>Margie Andreae, MD</td>
<td>Gregory L. Barkley, MD*</td>
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<td>Michael D. Bishop, MD</td>
<td>Eileen Brewer, MD*</td>
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<td>James Blankenship, MD</td>
<td>Kathleen Cain, MD*</td>
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<td>Robert Dale Blasier, MD</td>
<td>Joseph Cleveland Jr., MD*</td>
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<td>Jimmy Clark, MD</td>
<td>William D. Donovan, MD*</td>
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<td>Scott Collins, MD</td>
<td>Jeffrey Edelstein, MD*</td>
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<td>Gregory DeMeo, MD</td>
<td>William Fox, MD*</td>
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<td>Jane Dillon, MD</td>
<td>William Gee, MD*</td>
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<td>Verdi DiSesa, MD</td>
<td>Michael J. Gerardi, MD*</td>
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<td>James Gajewski, MD</td>
<td>Gregory Harris, MD*</td>
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<td>David F. Hitzeman, DO</td>
<td>David Han, MD*</td>
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<td>Kathy Krol, MD</td>
<td>Peter Hollmann, MD*</td>
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<td>Timothy Laing, MD</td>
<td>Gwenn Jackson, MD*</td>
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<td>Walter Larimore, MD</td>
<td>Mollie MacCormack, MD*</td>
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<td>Alan Lazaroff, MD</td>
<td>Bradley Marple, MD*</td>
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<td>M. Douglas Leahy, MD</td>
<td>Eileen Moynihan, MD*</td>
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<td>Scott Manaker, MD</td>
<td>Daniel Nagle, MD*</td>
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<td>Guy Orangio, MD</td>
<td>Dee Adams Nikjeh, PhD, CCP-SLP*</td>
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<td>Julia Pillsbury, DO</td>
<td>Scott Oates, MD*</td>
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<td>Gregory Przybylski, MD</td>
<td>M. Eugene Sherman, MD*</td>
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<td>Marc Raphaelson, MD</td>
<td>Samuel Silver, MD, PhD*</td>
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<td>Ezequiel Silva, MD</td>
<td>Robert J. Stomel, DO*</td>
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<td>Norman Smith, MD</td>
<td>Michael Sutherland, MD*</td>
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<td>Stanley Stead, MD</td>
<td>Thomas Weida, MD*</td>
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<td>James Waldorf, MD</td>
<td>David Wilkinson, MD, PhD*</td>
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<td>Jane V. White, PhD, RD</td>
<td>*Alternate</td>
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<td>Jennifer L. Wiler, MD</td>
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II. Chair’s Report

- Doctor Smith welcomed everyone to the RUC Meeting.

- Doctor Smith welcomed the Centers for Medicare & Medicaid Services (CMS) staff and representatives attending the meeting, and asked that Doctor Hambrick introduce the staff during her update.
• Doctor Smith welcomed the following Contractor Medical Directors:
  o Charles Haley, MD, MS
  o Richard Whitten, MD

• Doctor Smith welcomed the following Member of the CPT Editorial Panel:
  o Kathy Krol, MD –CPT Panel RUC Member

• Doctor Smith recognized departing RUC members:
  o Jane Dillon, MD
  o Margaret Neal, MD

• Doctor Smith welcomed new RUC members:
  o Jimmy Clark, MD
  o Kathy Krol, MD
  o Timothy Laing, MD
  o Julia Pillsbury, DO
  o Ezequiel Silva, III, MD
  o Christopher Senkowski, MD
  o Norman Smith, MD

• Doctor Smith welcomed new RUC alternates:
  o Kathleen Cain, MD
  o William Gee, MD
  o Gwenn Jackson, MD
  o Eileen Moynihan, MD
  o Michael Sutherland, MD
  o David Wilkinson, MD

• Doctor Smith spoke about and asked for a moment of silence in the memory of Chad Rubin, MD.

• Doctor Smith welcomed the following Observer:
  o Robyn Kuropatwa, RKL Health Informatics
    ▪ Consultant to the provincial government of Nova Scotia, Canada.
    ▪ Nova Scotia is transitioning to CPT in 2018.

• Doctor Smith welcomed the following Researcher:
  o Armando Lara-Millan, PhD
    ▪ RWIF Scholars in Health Policy Research Program University of California, Berkeley/UCSF
    ▪ Proposed a scientific publication related to his observations of the RUC process.
    ▪ All observations de-identified, publication to be reviewed by AMA
    ▪ Publication to be delayed by 1 year, so that code values will be finalized
    ▪ Individual interviews will be accompanied by individual consent, and will be voluntary

• Doctor Smith discussed a meeting with Sean Cavanaugh from CMS on August 1, 2016
  o Discussion of NPRM on Data Collection for Services in Surgical Global Periods
• Doctor Smith explained the following RUC established thresholds for the number of survey responses required:
  o Codes with ≥1 million Medicare Claims = 75 respondents
  o Codes with Medicare Claims from 100,000 to 999,999 = 50 respondents
  o Codes with <100,000 Medicare = 30 respondents
  o Surveys below the established thresholds for services with Medicare claims of 100,000 or greater will be reviewed as interim and specialty societies will need to resurvey for the next meeting.

• Doctor Smith laid out the following guidelines related to confidentiality:
  o All RUC attendees/participants are obligated to adhere to the RUC confidentiality policy. (All signed an agreement at the registration desk)
  o 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:
  o 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
  o RUC members or alternates sitting at the table may not present or debate for their society
  o Expert Panel – RUC Members exercise their independent judgment and are not advocates for their specialty

• Doctor Smith laid out the following procedural guidelines related to specialty society staff/consultants:
  o 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 laid out the following procedural guidelines related to commenting specialty societies:
  o 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.
  o 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 shared the following guidelines related to voting:
  o RUC votes are published annually on the AMA RBRVS website each November for the previous CPT cycle.
  o The RUC votes on every work RVU, including facilitation reports
    To insure we have 28 votes, please share voting remotes with your alternate if you step away from the table
If members are going to abstain from voting or leave the table, please notify AMA staff so we may account for all 28 votes

- Doctor Smith announced:
  - That all meetings are recorded for AMA staff to accurately summarize recommendations to CMS.
  - Only use Wi-Fi when necessary and limit to one device so they do not interrupt the work of the RUC.

III. Director’s Report

Sherry L. Smith, MS, CPA, Director of Physician Payment Policy and Systems, AMA provided the following Director’s Report:

- The RUC Database has been updated to include 2015 Medicare Claims data. Please ensure you have downloaded the most recent version.

- New RUC Survey Videos are available online for specialty use and dissemination to members.

- The CPT/RUC Calendar is included in meeting materials for reference.

- The CV of new RUC members and alternates are also provided in meeting materials.

IV. Approval of Minutes from April 2016 RUC Meeting

- The RUC approved the April 2016 RUC Meeting Minutes as submitted.

V. CPT Editorial Panel Update

Doctor Kathy Krol provided the following update of the CPT Editorial Panel:

- The CPT Editorial Panel met in Chicago in May and reviewed 40 tabs, several of which will be addressed at this meeting.
  - One item discussed in May was Telemedicine services. The Panel added additional guidelines for using the new synchronous telemedicine services modifier 95 and for reporting the codes listed in the new Appendix P with which modifier 95 may be reported to reflect synchronous telemedicine services. The new modifier and Appendix P are effective with the 2017 code set.

- The Panel met last week in Austin and reviewed 103 issues. 18 of them were RUC referrals.
  - 18 of the 103 issues were RUC referrals. The Panel was able to address 16 of these. The other two were postponed to time certain February 2017—Tab 69 - Pattern Electroretinography and Tab 77 - Neurostimulator Services.
The Panel established a process to address RUC items that are referred to CPT following the October RUC meetings going forward to accommodate the revised deadlines to provide CPT data files to CMS.

Doctor James Gajewski, MD was the RUC representative to the Panel at last week’s meeting, and the Panel continues to welcome any RUC members who wish to attend.

The new CPT Proprietary Laboratory Analyses (PLA) website portal opened on October 1 and is ready to accept applications. [https://apps.ama-assn.org/PAMA/](https://apps.ama-assn.org/PAMA/). The PLA codes will be published on a quarterly basis. The first round of codes will be published December 1, 2016 and effective February 1, 2017. The application closing date for this round of codes is October 15.

- The next Panel meeting will take place in February 9-11, 2017 in New Orleans. The submission deadline for code change applications for that meeting is November 9, 2016.

VI. **Centers for Medicare and Medicaid Services Update (Informational)**

Doctor Edith Hambrick provided the report of the Centers for Medicare & Medicaid Services (CMS):

- Doctor Hambrick introduced staff from CMS attending this meeting:
  - Carol Blackford – Director, Hospital Ambulatory Policy Group
  - Edith Hambrick, MD – CMS Medical Officer
  - Karen Nakano, MD – CMS Medical Officer
  - Steve Phurrough, MD – CMS Medical Officer

- Doctor Hambrick announced that the Agency appreciated the comments on the notice of proposed rulemaking (NPRM). The Physicians’ Fee Schedule Final Rule should be published by November 1st.
- Doctor Hambrick announced that Steve Phurrough, MD will be retiring in early 2017.

VII. **Contractor Medical Director Update (Informational)**

Doctor Charles E. Haley, MD, MS, FACP, Medicare Contractor Medical Director, Noridian, provided the contractor medical director update:

- Jurisdiction J was re-bid and the award was not announced yet but we should hear soon.

- Periodically the names of contracts change. The group who investigates potential fraud has now been named Unified Program Integrity Contractor (UPI) as the efforts to investigate potential fraud in Medicaid and Medicare is being combined.

- There was a massive update for the ICD-10 code set this year, including many diabetic complication codes. Articles about the changes should be published for reference.
VIII. Relative Value Recommendations for CPT 2018:

Psychiatric Collaborative Care Management Services (Tab 4)
Jeremy S. Musher, MD (APA); Sherry Barron-Seabrook, MD (AACAP); Jennifer Aloff, MD (AAFP); Mary Newman, MD (ACP); John Agens, MD (AGS)

In February 2016, the CPT Editorial Panel created three new codes to describe a model for providing psychiatric care in the primary care setting. This code set is one of several in response to a request from CMS to facilitate appropriate valuation of the services furnished under the Collaborative Care Model (CoCM). This CoCM is used to treat patients with common psychiatric conditions in the primary care setting through the provision of a defined set of services which operationalize the following core concepts: 1) Patient-Centered Team Care/Collaborative Care; 2) Population-Based Care; 3) Measurement-Based Treatment to Target; and 4) Evidence-Based Care.

The RUC reviewed the new code set for Psychiatric Collaborative Care Management, which captures a primary care physician working with a behavioral health manager and consulting psychiatrist to manage patient psychiatric care. The specialty societies requested that this issue be deferred until the January 2017 RUC meeting. The RUC noted that an Ad Hoc Workgroup has been created to provide feedback and guidance to the specialties involved to appropriately survey this code set. The Workgroup and the Research Subcommittee will review the unique survey plan and survey tool before it is launched. The RUC also recommended inclusion of a proposed G code, GPXXX, which was noted in the 2016 Notice of Proposed Rule Making, to be included in the survey for this issue if it remains in the Final Rule that is published on or around November 1, 2016.

The RUC recommends deferral of the valuation of CPT codes 99492, 99493, 99494, and 99484 to the January 2017 RUC meeting.

Pulmonary Diagnostic Tests (Tab 5)
Katina Nicolacakis MD, Alan Plummer, MD, (ATS); Robert DeMarco, MD, Kevin Kovitz, MD (CHEST)

In the Final Rule for 2016 CMS re-ran the high expenditure services across specialties with Medicare allowed charges of $10 million or more. CMS identified the top 20 codes by specialty in terms of allowed charges, excluding 010 and 090-day global services, anesthesia and Evaluation and Management services and services reviewed since CY 2010. CPT code 94620 was identified via this screen.

In January 2016, the specialty societies explained that they submitted a Code Change Application (CCA) for the February 2016 CPT Editorial Panel meeting as CPT codes 94620 and 94621 required revisions that would allow the survey respondents to better value these services. Code 94620 described two different tests commonly performed for evaluation of dyspnea, the six minute walk test as well as pre-exercise and post-exercise spirometry. These tests are entirely different and should be described with two separate codes. In addition, code 94620 described a “simple” pulmonary exercise test and code 94621 a “complex” pulmonary exercise test. The testing described in 94621 is commonly called a cardiopulmonary exercise test (CPET) and not a complex pulmonary exercise test as it is currently labeled in CPT 2016. Code 94621 includes the measurement of
minute ventilation and exhaled gases in addition to heart rate, oximetry and ECG monitoring. As such, it should not be included as part of the family of less complex exercise tests. The RUC referred CPT code 94620 to the CPT Editorial Panel. In February 2016, the CPT Editorial Panel deleted code 94620, added two new codes 94617 & 94618 to report an exercise test for bronchospasm, and revised code 94621 to describe a cardiopulmonary exercise test.

The RUC discussed the survey results for CPT codes 94617, 94621 and 94618 and determined that the survey respondents indicated immediate post-procedure physician time was not representative of the time required to perform this service. The RUC noted that the description of immediate post-procedure physician work described the same intensity for each of the three services but was not represented the same across all three services by the survey respondents.

The standard survey instrument did indicate that the survey respondents should capture the interpretation and report work in the intra-service time period as is typical for XXX global services, but the specialty society contends that the survey respondents did not appear to capture the physician time correctly. The RUC recommended that the specialty societies resurvey codes 94617, 94621 and 94618 with the same exact survey instrument (the current standard RUC survey for imaging and tests) for the October 2016 RUC meeting.

94618 Pulmonary stress testing (eg, 6-minute walk test), including measurement of heart rate, oximetry and oxygen titration, when performed

The RUC reviewed the survey data from 73 physician providers and recommends the survey 25th percentile work RVU of 0.48. The RUC recommends the following physician time: pre-service time of 3 minutes, intra-service time of 10 minutes, and immediate post-service time of 4 minutes. The pre and post time were discussed in detail because an Evaluation and Management (E/M) service is performed on the same day. Therefore, 2 minutes of pre-service evaluation and 6 minutes of immediate post-service time were removed to ensure no duplication of work is performed. It was noted that this code should represent 95% of services previously reported with CPT code 94620. Newly described code 94618 requires less physician time than previously reported 94620 and thus the RUC is recommending a decrease in the work RVU for this service.

The RUC compared this service to CPT code 99212 Office or other outpatient visit for the evaluation and management of an established patient…Typically, 10 minutes are spent face-to-face with the patient and/or family. (work RVU=0.48, intra-service time of 10 minutes) and code 74230 Swallowing function, with cineradiography/videoangiography (work RVU=0.53 and an intra-service time of 10 minutes) and noted that both reference services have identical intra-service time and should be valued similarly. To further validate a work RVU of 0.48, the RUC compared the survey code to top key reference code 93015 Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; with supervision, interpretation and report (work RVU=0.75, intra-service time of 20 minutes) and noted that the survey code has lower intra-service time, and the survey respondents indicated that the survey code is identical to less intense to perform, further justifying this valuation. The RUC recommends a work RVU of 0.48 for CPT code 94618.
94617 Exercise test for bronchospasm, including pre- and post-spirometry and pulse oximetry

The RUC reviewed the survey data from 71 physician providers and recommends the survey median of 0.70 work RVUs for CPT code 964X2. The RUC recommends the following physician time: pre-service time of 6 minutes, intra-service time of 10 minutes, and immediate post-service time of 10 minutes. It was noted that this code should represent 5% of services previously reported with CPT code 94620 and that this service is not billed with an E/M typically, leading to acceptance of the survey median pre and post-service times. This post-service time work reflects the following: Discuss the findings with the patient. Discussion includes the patient's response to exercise, severity of bronchospasm along with appropriate change in their medication regimen. Further discussion of mandatory exercise preparation including warm up and modifications as needed based on environmental conditions, (i.e. warming devices). Additionally, instructions need to be given on pre-exercise medication use and timing, dietary modification and nutritional supplementation. Develop plans for therapy and/or additional testing. Communicate the results with the referring physician and complete any necessary return forms.

For additional support the RUC referenced similar services 76642 Ultrasound, breast, unilateral, real time with image documentation, including axilla when performed; limited (work RVU=0.68, intra-service time of 10 minutes) and 78226 Hepatobiliary system imaging, including gallbladder when present; (work RVU=0.74, intra-service time of 10 minutes). To validate a work RVU of 0.70, the RUC compared the survey code to top key reference code 93015 Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; with supervision, interpretation and report (work RVU=0.75, intra-service time of 20 minutes) and noted that the survey code has slightly lower intra-service time, and the survey respondents indicated that the survey code is identical to somewhat less intense to perform, further justifying this valuation. The RUC recommends a work RVU of 0.70 for CPT code 94617

94621 Cardiopulmonary exercise testing (including measurements of minute ventilation, CO2 production, O2 uptake, and electrocardiographic recordings

The RUC reviewed the survey data from 70 physician providers and recommends maintaining the current work RVU of 1.42 for CPT code 94621. The RUC recommends the following physician time: pre-service time of 10 minutes, intra-service time of 30 minutes, and immediate post-service time of 10 minutes. The RUC compared this service to 95806 Sleep study, unattended, simultaneous recording of, heart rate, oxygen saturation, respiratory airflow, and respiratory effort (eg, thoracoabdominal movement) (work RVU=1.25, intra-service time of 25 minutes) and 99214 Office or other outpatient visit for the evaluation and management of an established patient...Typically, 25 minutes are spent face-to-face with the patient and/or family. (work RVU=1.50, intra-service time of 25 minutes) and noted that both reference services have comparable physician work and time with code 94621 and provide appropriate brackets around the recommended value.

For additional support, the RUC referenced similar services 99203 Office or other outpatient visit for the evaluation and management of a new patient (work RVU=1.42, intra-service time of 20 minutes) and 99497 Advance care planning including the explanation and discussion of advance directives such as standard forms (with completion of such forms, when performed), by the physician or other qualified health
care professional; first 30 minutes, face-to-face with the patient, family member(s), and/or surrogate (work RVU=1.50, intra-service time of 30 minutes). To validate a work RVU of 1.42, the RUC compared the survey code to top key reference code 93015 Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; with supervision, interpretation and report (work RVU=0.75, intra-service time of 20 minutes) and noted that the survey code has higher intra-service time, and the survey respondents indicated that the survey code is somewhat more to much more intense to perform, further justifying this valuation. The RUC recommends a work RVU of 1.42 for CPT code 94621.

Practice Expense:
The RUC reviewed and accepted the direct PE 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.

Esophagectomy (Tab 6)
Francis C. Nichols, MD FACS; John Howington, MD FACS; Stephen Lahey, MD (AATS); Charles Mabry, MD FACS (ACS); Nadar Massarweh, MD; Don Selzer, MD FACS (SAGES); Keton Sheth, MD FACS (STS)

In October 2015, the CPT Editorial Panel created three new codes 43286, 43287, 43288 to report esophagectomy via laparoscopic and thoracoscopic approaches, and revised 43112 to clarify this service. However, following the CPT meeting, during the CPT Panel minutes review the vignettes were altered, removing the statement that the typical patient undergoes chemotherapy and radiation therapy prior to surgery. The specialties contacted the CPT Panel and tried to correct prior to the survey; however, the Panel did not adjust the vignette. The specialty societies conducted a survey and found that a significant number of respondents did not agree that the changed vignette described the typical patient and noted that the typical patient does undergo neoadjuvant chemotherapy and radiation therapy prior to surgery. Therefore, the specialty societies believed the survey was flawed and the codes should be re-surveyed with the appropriate vignette. After review of the survey results, the specialty societies also found that significant rank order anomalies existed among the three most common open approach esophagectomy codes 43107, 43112, and 43117. Additionally, there had been significant changes in the patient population for these procedures. The open approach codes were last reviewed by the RUC in 2000 as part of the second 5-year review. The specialty societies recommended re-survey of codes 43107, 43112, and 43117. The RUC agreed with the specialty societies and recommended: 1) the CPT Editorial Panel table new codes 43286, 43287, 43288 until CPT 2018; 2) the specialty societies go to the Research Subcommittee to obtain approval for the current typical patient (vignette) for both the new thoracoscopic/laparoscopic codes and open codes (43107, 43112 and 43117); and 3) the specialty societies survey all six codes for the October 2016 RUC meeting.

At the October 2016 RUC meeting, the RUC questioned why open approach codes 43108, 43113 and 43118 were not also surveyed. The specialty societies indicated and the RUC agreed that the only similarity between 43107, 43112, and 43117 and 43108, 43113 and 43118 is the surgical approach(es) and the ultimate location of the esophageal
anastomosis. The other key parts of 43108, 43113, and 43118 are substantially different. Codes 43107, 43112, and 43117 utilize stomach to reestablish continuity between the remaining esophagus and stomach following removal of the diseased portion of the esophagus and stomach. Codes 43108, 43113, and 43118 involve removal of the diseased esophagus and entire stomach but intestinal continuity is then restored utilizing either the small intestine or colon, which represents significantly different and more physician work. To re-establish esophageal to intestinal continuity with small intestine or colon requires mobilization and preparation of the mesentery for transposition. Additionally, more anastomoses are required if small bowel or colon are utilized—one additional anastomosis for small bowel and three additional anastomoses for colon. The RUC agreed that the only similarities between 43107 and 43108, 43112 and 43113, and 43117 and 43118 are the approach and location of the esophageal anastomosis, and otherwise physician work is different. Codes 43108, 43113, and 43118 were reviewed as part of the Third Five-Year Review and are rarely performed (less than 10 Medicare claims per year) and would be difficult to survey (ie, find surgeons with recent experience).

Compelling Evidence
The specialty societies identified three points that support compelling evidence: rank order anomaly, flawed survey methodology and a change in work since the last RUC review in 2000. The RUC agreed that there is an anomalous relationship between codes 43107, 43112 and 43117. The compelling evidence points discussed are detailed below.

Rank order anomaly
Due in large part to the flawed survey methodology, there now exists a rank order anomaly for codes 43107, 43112, 43117 with all other 90-day global procedures that have significant intra-time and significant post-operative work. For example, 43117, a procedure that requires both a large thoracotomy incision and a laparotomy is valued less than 43107, a procedure that requires a laparotomy and a neck incision. In addition, 43112, a procedure that requires three incisions including a thoracotomy, laparotomy, and a neck incision, is valued less than 43121, a procedure that necessitates only a thoracotomy incision. The RUC agreed that this anomalous relationship demonstrates compelling evidence for codes 43107, 43112 and 43117.

Flawed Methodology
The flawed survey methodology is best summarized as utilization of an inappropriate, circular RSL when code 43117 was reviewed in 2000, a time when the codes that were being surveyed were also included in the RSL. At the following RUC meeting in 2001, for the survey of 43107 and 43112, code 43117 was included in the RSL and was chosen as the key reference for both codes. The end result was perpetuation of the flawed value of 43117. Therefore, the elements of a circular and inappropriate RSL during the review in 2000 applied by the limitations of the Medicare fee schedule relative value scale at the time of the second Five-Year Review generated a flawed survey process.

Change in work
As a result of changes in technology, there has been a dramatic change in total physician work, especially the postoperative management. Over the last 15 years, there have been advances in technology that allow patients with early stage esophageal cancer to undergo endoscopic mucosal resection (EMR), thereby avoiding major surgical resection. This change in disease management has led to a decline in total patients undergoing esophagectomy. EMR is now the preferred treatment for patients with Barrett’s esophagus with high-grade dysplasia, T1a invasive cancers, and increasingly some T1b
invasive cancers. Therefore, patients with Stage 0, Stage 1A, and now even Stage 1B can avoid major resection leaving only patients with locally advanced cancers to undergo major resections. As a result, the majority of patients undergoing esophagectomy have T2 or greater disease, and this was clearly not the case during the review in 2000. Studies published utilizing the SEER database1 and National Cancer Database2 support the fact that patients who now undergo esophageal resection require more complex total care than patient cohorts at the time of the prior survey since they are genuinely sicker patients coming into the surgery. This new cohort of patients will require more complex postoperative management, resulting in higher levels of post-operative visits.

In summary, during the last review of these codes, an inappropriate circular RSL created a flawed survey methodology. This flawed methodology perpetuated inappropriate valuation and has created rank order anomalies for these three codes when compared with other codes in the physician payment schedule that include significant and comparable total physician work. In addition, advancement in technology over the last 15 years has significantly changed the total physician work, most significantly the post-operative work, for codes 43107, 43112 and 43117.

RUC Review
CMS questioned whether any of the codes on the October 2016 reference service list (RSL) were valued using the STS database and mean times. The specialty societies indicated that a combination of the STS database and ACS National Surgical Quality Improvement Program (NSQIP) data with median times were used, not mean, when valuing the services on the current RSL.

CMS questioned if any high work RVU codes were added to the current RSL and/or what were the modifications. The specialty society indicated that the high work RVU and low work RVU codes were removed, along with the existing codes currently being surveyed. As suggested by the Research Subcommittee, codes were then added in the middle range of work RVUs for the 2016 survey RSL to help fill in the big gap between 51.00 and 67.00 and to fill in another gap that was created when the open approach codes were removed.

A RUC member questioned what occurred in the third Five-Year Review with this set of codes. The specialty indicated that only 3 codes were extracted and compelling evidence met to be reviewed at the second Five-Year Review with an additional 9 codes allowed to be reviewed in 2001. The remaining esophagectomy codes were not reviewed until the third Five-Year Review, thus causing various additional anomalies.

43107 Total or near total esophagectomy, without thoracotomy; with pharyngogastrostomy or cervical esophagogastrostomy, with or without pyloroplasty (transhiatal)
The RUC reviewed the survey responses from 63 general and thoracic surgeons and determined that the survey 25th percentile work RVU of 52.05 appropriately accounts for the work required to perform this service. The RUC recommends 60 minutes evaluation, 20 minutes positioning, 15 minutes scrub/dress/wait time, 270 minutes intra-service and 45 minutes immediate post-service time. This service is performed via a separate laparotomy and left neck incision, removal of the esophagus is both by sharp and blunt dissection, but also blind dissection within the mediastinum freeing it up from the trachea, the aorta and the azygos vein. The esophagogastric anastomosis is ultimately
accomplished in the neck by sewing or stapling the esophagus to the stomach. The surgeon manages the post-operative intensive care.

The RUC noted that the previous value was incorrect and cannot be used to compare the current recommendation. The RUC compared the surveyed code to the second key reference service 43121 Partial esophagectomy, distal two-thirds, with thoracotomy only, with or without proximal gastrectomy, with thoracic esophagogastronomy, with or without pyloroplasty (work RVU = 51.43 and 240 minutes intra-service time) and noted that the survey respondents indicated that 43107 was more intense and complex on all measures. The RUC also referenced MPC code 33863 Ascending aorta graft, with cardiopulmonary bypass, with aortic root replacement using valved conduit and coronary reconstruction (eg, Bentall) (work RVU = 58.79 and 287 minutes) noting that 33863 requires slightly more time and physician work than the surveyed service, further supporting the value for the survey code. The RUC recommends a work RVU of 52.05 for CPT code 43107.

43117 Partial esophagectomy, distal two-thirds, with thoracotomy and separate abdominal incision, with or without proximal gastrectomy; with thoracic esophagogastronomy, with or without pyloroplasty (Ivor Lewis)

The RUC reviewed the survey responses from 67 general and thoracic surgeons and determined that the survey 25th percentile work RVU of 57.50 appropriately accounts for the work required to perform this service. The RUC recommends 60 minutes evaluation, 30 minutes positioning, 15 minutes scrub/dress/wait time, 330 minutes intra-service and 45 minutes immediate post-service time. This service is performed by a separate laparotomy incision and then after laparotomy incision is closed, the patient is repositioned to their side. Through a separate right thoracotomy incision the remaining esophagus is resected and the tubularized stomach is brought high into the chest and anastomosis is performed.

The 2016 survey data shows that 2 critical care visits (99291) are now inherent in postoperative care for code 43117, which is a change from the current inputs from 2000. The RUC noted that the two critical care visits (99291) are consistent with the existing visit pattern for 43107 and 43112. Patients who now undergo esophageal resection require more complex total care than the typical patient at the time of the prior survey since they are genuinely sicker patients. Patients typically spend 5 to 6 hours under general anesthesia. These patients are in critical condition after this physiologically arduous procedure that involves invasion and disruption of the organs and structures in the chest, mediastinum, and abdominal cavities including resection of the esophagus and the stomach. The surgeon must manage the functions of one or more vital organ systems during the immediate post-operative period to assess, and manipulate recovery after surgery to prevent deterioration in the patient’s condition.

The operating surgeon is best positioned to understand the nuances of postoperative care for these complex patients in the ICU and will take the lead in patient management which includes but is not limited to the following: these patients have significant third spacing fluid changes in the first 48 to 72 hours, are at risk of vocal cord paresis, or paralysis, and often have significant respiratory complications. They need aggressive pulmonary care for secretion control to prevent atelectasis and in turn pneumonia. They need careful monitoring of their blood pressure and urine output. The patient is at risk for mediastinal bleeding and the anastomotic sites must be closely managed and monitored for leakage. They also have a higher than usual need for blood transfusion. Management of
nasogastric tube or other issues that limits the patient’s ability to cough early on is also imperative. Pain management of the thoracotomy and laparotomy is also required. These patients have two chest tubes in the right chest, an epidural catheter for pain control and Foley catheter for strict in and out monitoring, as well as an arterial line for blood pressure monitoring. The surgeon is managing this post-operative intensive care.

The RUC compared the surveyed service with the top key reference service 43121 Partial esophagectomy, distal two-thirds, with thoracotomy only, with or without proximal gastrectomy, with thoracic esophagogastrostomy, with or without pyloroplasty (work RVU = 51.43 and 240 minutes intra-service time) noting that 64% of survey respondents indicated that the overall intensity and complexity for these services are identical and 36% indicated that the survey code was more intense and complex. The RUC noted that the previous value was incorrect and cannot be used to compare the current recommendation. The current IWPUT of 0.088 for 43117 is appropriate, especially relative to the intensity of 99291 Critical care, evaluation and management of the critically ill or critically injured patient; first 30-74 minutes has a IWPUT of 0.096. The RUC also referenced MPC code 33863 Ascending aorta graft, with cardiopulmonary bypass, with aortic root replacement using valved conduit and coronary reconstruction (eg, Bentall) (work RVU = 58.79 and 287 minutes), noting these services require similar physician work and time, thus validating the recommendation. The RUC recommends a work RVU of 57.50 for CPT code 43117.

43112 Total or near total esophagectomy, with thoracotomy; with pharyngogastrostomy or cervical esophagogastrostomy, with or without pyloroplasty (ie, McKeown esophagectomy, or tri-incisional esophagectomy)
The RUC reviewed the survey responses from 65 general and thoracic surgeons and determined that the survey 25th percentile work RVU of 62.00 appropriately accounts for the work required to perform this service. The RUC recommends 60 minutes evaluation, 30 minutes positioning, 15 minutes scrub/dress/wait time, 360 minutes intra-service and 45 minutes immediate post-service time. This service starts with a full right thoracotomy with dissection of the intrathoracic esophagus under direct vision. After closing the thoracotomy incision, the patient is repositioned to the supine position. Through a separate laparotomy and left neck incision the remaining esophagus and stomach are resected as necessary and the anastomosis is performed high in the left neck. The physician work in code 43112 is essentially a combination of the work involved in both codes 43107 and 43117. The surgeon manages the post-operative intensive care.

The RUC noted that the previous value was incorrect and cannot be used to compare the current recommendation. The RUC compared the surveyed service with the top key reference service 43124 Total or partial esophagectomy, without reconstruction (any approach), with cervical esophagostomy (work RVU = 69.09 and 243 minutes of intra-service time). The RUC noted and agreed with the 59% of survey respondents who indicted that CPT code 43112 is overall more intense and complex. The RUC also referenced MPC code 33863 Ascending aorta graft, with cardiopulmonary bypass, with aortic root replacement using valved conduit and coronary reconstruction (eg, Bentall) (work RVU = 58.79 and 287 minutes) and similar service CPT code 33411 Replacement, aortic valve; with aortic annulus enlargement, noncoronary sinus (work RVU = 62.07 and 283 minutes intra-service time) noting these services require similar physician work and time, thus validating the recommendation. The RUC recommends a work RVU of 62.00 for CPT code 43112.
43286 Esophagectomy, total or near total, with laparoscopic mobilization of the abdominal and mediastinal esophagus and proximal gastrectomy, with laparoscopic pyloric drainage procedure if performed, with open cervical pharyngogastrostomy or esophagogastrostomy (ie, laparoscopic transhiatal esophagectomy)

The RUC reviewed the survey responses from 56 general, gastrointestinal and thoracic surgeons and determined that the survey 25th percentile work RVU of 55.00 appropriately accounts for the work required to perform this service. The RUC recommends 60 minutes evaluation, 20 minutes positioning, 20 minutes scrub/dress/wait time, 300 minutes intra-service and 60 minutes immediate post-service time. The surgeon manages the post-operative intensive care.

The RUC compared the surveyed code to the top key reference code 43121 Partial esophagectomy, distal two-thirds, with thoracotomy only, with or without proximal gastrectomy, with thoracic esophagogastrostomy, with or without pyloroplasty (work RVU = 51.43 and 240 minutes intra-service time) and the RUC agreed with the 94% of respondents who indicated that the surveyed code is overall more intense and complex. The RUC also referenced MPC code 33863 Ascending aorta graft, with cardiopulmonary bypass, with aortic root replacement using valved conduit and coronary reconstruction (eg, Bentall) (work RVU = 58.79 and 287 minutes) and similar service CPT code 47785 Anastomosis, Roux-en-Y, of intrahepatic biliary ducts and gastrointestinal tract (work RVU = 56.19 and 360 minutes intra-service time), noting these services require similar physician work and time, thus validating the recommendation. The RUC recommends a work RVU of 55.00 for CPT 43286.

43287 Esophagectomy, distal two-thirds, with laparoscopic mobilization of the abdominal and lower mediastinal esophagus and proximal gastrectomy, with laparoscopic pyloric drainage procedure if performed, with separate thoracoscopic mobilization of the middle and upper mediastinal esophagus and thoracic esophagogastrostomy (ie, laparoscopic-thoracoscopic esophagectomy, Ivor Lewis esophagectomy)

The RUC reviewed the survey responses from 59 general and thoracic surgeons and determined that the survey 25th percentile work RVU of 63.00 appropriately accounts for the work required to perform this service. The RUC recommends 60 minutes evaluation, 30 minutes positioning, 20 minutes scrub/dress/wait time, 360 minutes intra-service and 60 minutes immediate post-service time. The surgeon manages the post-operative intensive care.

A RUC member questioned the differences in 43287 and 43112 since they both require 360 minutes intra-service time. The specialty society indicated and the RUC agreed that the complexity of the patients is probably similar; however, the difference is in the approach. The McKeown service (43112) requires a separate thoracotomy, abdomen and neck incisions. Whereas code 43287 only requires a laparoscopic and thoracoscopic approaches. Overall, the laparoscopic and thoracoscopic approaches require more physician work, intensity and complexity in these cases.

The RUC compared the surveyed code to the top key reference code 43118 Partial esophagectomy, distal two-thirds, with thoracotomy and separate abdominal incision, with or without proximal gastrectomy; with colon interposition or small intestine reconstruction, including intestine mobilization, preparation, and anastomosis(es) (work RVU = 67.07 and 327 minutes of intra-service time) and noted that 88% of respondents indicated that the surveyed code is overall more intense and complex. The RUC also
referenced MPC code 33863 Ascending aorta graft, with cardiopulmonary bypass, with aortic root replacement using valved conduit and coronary reconstruction (eg, Bentall) (work RVU = 58.79 and 287 minutes) and similar service CPT code 61697 Surgery of complex intracranial aneurysm, intracranial approach; carotid circulation (work RVU = 63.40 and 300 minutes intra-service time), noting all three services require similar physician work and time, thus validating the recommendation. The RUC recommends a work RVU of 63.00 for CPT code 43287.

43288 Esophagectomy, total or near total, with thoracoscopic mobilization of the upper, middle, and lower mediastinal esophagus, with separate laparoscopic proximal gastrectomy, with laparoscopic pyloric drainage procedure if performed, with open cervical pharyngogastrostomy or esophagogastrostomy (ie, thoracoscopic, laparoscopic and cervical incision esophagectomy, McKeown esophagectomy, tricarcinal esophagectomy)
The RUC reviewed the survey responses from 60 general and thoracic surgeons and determined that the survey 25th percentile work RVU of 66.42 appropriately accounts for the work required to perform this service. The RUC recommends 60 minutes evaluation, 30 minutes positioning, 20 minutes scrub/dress/wait time, 420 minutes intra-service and 60 minutes immediate post-service time. The surgeon manages the post-operative intensive care.

The RUC compared the surveyed code to the top key reference code 43124 Total or partial esophagectomy, without reconstruction (any approach), with cervical esophagostomy (work RVU = 69.09 and 243 minutes of intra-service time) and noted that 80% of respondents indicated that the surveyed code is overall more intense and complex. The RUC also referenced MPC code 33863 Ascending aorta graft, with cardiopulmonary bypass, with aortic root replacement using valved conduit and coronary reconstruction (eg, Bentall) (work RVU = 58.79 and 287 minutes) and similar service CPT code 61686 Surgery of intracranial arteriovenous malformation; infratentorial, complex (work RVU = 67.50 and 420 minutes intra-service time) noting these services require similar physician work and time, thus validating the recommendation. The RUC recommends a work RVU of 66.42 for CPT code 43288.

Practice Expense
The Practice Expense Subcommittee deleted an exam light from the 4th post-operative visit and corrected the equipment minutes. The remaining direct practice expense inputs are the standards for 090-day global facility-only codes. The RUC recommends the direct practice expense inputs as modified by the PE Subcommittee.

Intraoperative Radiation Therapy Applicator Procedures (Tab 7)
Eric Whitacre, MD, FACS; Janie Grumley, MD, FACS (ASBrS)

At the May 2016 CPT meeting, the CPT Editorial Panel established one Category I code for reporting intraoperative radiation therapy applicator procedures.

19294 Preparation of tumor cavity, with placement of a radiation therapy applicator for intraoperative radiation therapy (IORT) concurrent with partial mastectomy (List separately in addition to code for primary procedure)
The RUC reviewed the survey results from 71 breast surgeons and agreed with the following physician time components: intra-service time of 40 minutes. The specialty noted that this add-on service is performed in conjunction with either lumpectomy or a partial
mastectomy. The radiation therapy is delivered only once per breast; it is possible to perform it in each breast following a lumpectomy on both sides.

The RUC reviewed the survey median work RVU of 3.00 and agreed that it would be appropriate account for the physician work involved in performing this service. To justify a work RVU of 3.00, the RUC compared the survey code to 2nd key reference code 14302 *Adjacent tissue transfer or rearrangement, any area; each additional 30.0 sq cm, or part thereof (List separately in addition to code for primary procedure)* (work RVU of 3.73 and intra-service time of 40 minutes) and noted that both services have identical intra-service time. Similar to 14302, code 19294 includes a breast flap that is created in all directions around the defect to allow for transposition of surrounding breast tissue. In 19294 this mobilization allows secure, appropriate, approximation of breast tissue to the intraoperative radiation therapy applicator to ensure accurate radiation therapy to the targeted breast tissue. In addition to deep tissue planes, mobilization of skin flaps occurs for both 14302 and 19294. These circumferential skin flaps are mobilized around the radiation site to further assist creation of the target volume as well as enable protection of the skin from radiation injury. In comparison to 14302, the total area being mobilized in 19294 would approximate or exceed 30cm2. Code 19294 is different than 14302 in that it does not involve contouring of tissue and cosmetic closure of the defect, both of which add to the complexity/intensity of 14302. To further support a work RVU of 3.00, the RUC compared the survey code to CPT code 29826 *Arthroscopy, shoulder, surgical; decompression of subacromial space with partial acromioplasty, with coracoacromial ligament (ie, arch) release, when performed (List separately in addition to code for primary procedure)* (work RVU=3.00, intra-service time of 40 minutes) and noted that both services have identical physician time and involve a similar amount of physician work. The RUC also compared this service to all other ZZZ services with 40 minutes of intra-service time, and noted 3.00 represents an appropriate value for 19294 relative to these other services. **The RUC recommends a work RVU of 3.00 for CPT code 19294.**

**Practice Expense**

Since this is an intra-operative procedure, there are no direct practice expense inputs for this service.

**New Technology**

This service will be placed on the New Technology list and be re-reviewed by the RUC in three years to ensure correct valuation and utilization assumptions.

**Bronchial Aspiration of Tracheobronchial Tree (Tab 8)**

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

In October 2015, AMA staff re-ran the Harvard valued codes with utilization over 30,000 based on 2014 Medicare claims data and this service was identified. The RAW determined that this service would be placed on the next level of interest form to survey. Prior to surveying, the specialty societies noted that a Code Change Application (CCA) was needed. The coding change was reviewed by the CPT Editorial Panel in May 2016, in which the CPT Editorial Panel revised code 31645 by adding the "initial" and revised code 31646 to reflect "same hospital stay".
31645 Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed with therapeutic aspiration of tracheobronchial tree, initial

The RUC reviewed the survey results from 116 thoracic and chest physicians and recommend the following physician time components: evaluation time of 10 minutes, positioning time 5 minutes, scrub/dress/wait time 10 minutes, intra-service time of 35 minutes and immediate post-service time of 15 minutes. The RUC agreed that the pre-service evaluation time should be 10 minutes, 5 minutes less than the survey median to ensure that the work of moderate sedation, which is now reported separately, is not included. The RUC also agreed that additional 4 minutes is needed to position the patient because they often need to be readjusted based on oxygenation and other factors.

The RUC reviewed the survey respondents’ estimated physician work values and agreed that the survey 25th percentile work RVU of 2.88 accurately accounts for the work in code 31645. To justify a work RVU of 2.88, the RUC compared the surveyed code to the top key reference code 31622 Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; diagnostic, with cell washing, when performed (separate procedure) (work RVU= 2.78, intra time= 30 minutes) and agreed that while a majority of respondents rate both services as equally complex, the surveyed code has 5 additional minutes of intra-service time and should be valued slightly higher. The RUC also considered CPT code 57156 Insertion of a vaginal radiation afterloading apparatus for clinical brachytherapy (work RVU= 2.69, intra time= 30 minutes) and MPC code 11043 Debridement, muscle and/or fascia (includes epidermis, dermis, and subcutaneous tissue, if performed); first 20 sq cm or less (work RVU= 2.70, intra time= 30 minutes) and agreed that both codes offer appropriate relative comparators to code 31645. Finally, the RUC clarified that with the transition to the new separately reported moderate sedation codes, this value, the survey 25th percentile, does not include any physician work for this separate procedure. This is reflected in the descriptions of work, which does not mention moderate sedation. The RUC recommends a work RVU of 2.88 for CPT code 31645.

31646 Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed with therapeutic aspiration of tracheobronchial tree, subsequent, same hospital stay

Prior to valuing this procedure, the RUC considering compelling evidence that the physician current work RVUs may be misvalued. First, the specialty noted that an anomalous relationship exists between code 31646 and the base diagnostic bronchoscopy code 31622 Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; diagnostic, with cell washing, when performed (separate procedure) (work RVU= 2.78). The current work value for code 31646 (work RVU= 2.72) is less than the current value for 31622. This is anomalous because CPT code 31646 includes all the work of a diagnostic procedure plus the additional work of the work of the pulmonary aspiration. Therefore, under no circumstances should code 31646 be valued less than the base code. Second, the specialties noted that the CPT changes to code 31646 now require that this code be performed in the inpatient hospital setting, due to the clarification of “same hospital stay” in the descriptor. This means that the typical patient will now be sicker with higher amounts of comorbidities, causing increased physician work. The RUC agreed that there is compelling evidence that the current work value for code 31646 may be misvalued.

The RUC reviewed the survey results from 113 thoracic and chest physicians and recommend the following physician time components: evaluation time of 10 minutes
positioning time 5 minutes, scrub/dress/wait time 10 minutes intra-service time of 30 minutes and immediate post-service time of 15 minutes. The RUC agreed that the pre-service evaluation time should be 10 minutes, 5 minutes less than the survey median to ensure that the work of moderate sedation, which is now reported separately, is not included. The RUC also agreed that additional 4 minutes is needed to position the patient because they often need to be readjusted based on oxygenation and other factors.

The RUC reviewed the survey respondents’ estimated physician work values and agreed that the survey 25th percentile work RVU of 2.78 accurately accounts for the work in code 31646. To justify a work RVU of 2.78, the RUC compared the surveyed code to top key reference code 31622 Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; diagnostic, with cell washing, when performed (separate procedure) (work RVU= 2.78, intra time= 15 minutes) and noted that while there is some magnitude of additional work in 31646 compared to the reference code, the survey respondents indicated an intra-service time of 30 minutes for the surveyed code, identical to 31622. Therefore, the RUC agreed that a work RVU of 2.78 is appropriate for code 31646. The RUC also compared this code to the “initial” code just reviewed, CPT code 31645, and agreed that 31646 requires slightly less work and should be valued accordingly. Finally, as with 31645, the RUC clarified that with the transition to the new separately reported moderate sedation codes, this value, the survey 25th percentile, does not include any physician work for this separate procedure. This is reflected in the descriptions of work, which does not mention moderate sedation. The RUC recommends a work RVU of 2.78 for CPT code 31646.

Practice Expense:
The Practice Expense Subcommittee reviewed the CPT changes to code 31646 and noted that it now requires that this procedure be done in the facility setting. Therefore, the non-facility direct PE inputs were completely removed from code 31646. In addition, several modifications were made now that moderate sedation will be separately reported by new CPT codes. First, the oxygen supply item was added and the moderate sedation supplies and equipment were removed completely. The RUC accepted the direct practice expense inputs as modified 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.

Laparoscopic Total Pelvic Lymphadenectomy (Tab 9)
George A. Hill, MD, Jon Hathaway, MD, Mitch Schuster, MD, Barbara Goff, MD and Mark Shahin, MD (ACOG)
Facilitation Committee #1

The CPT Editorial Panel created a new code to describe the laparoscopic bilateral total pelvic lymphadenectomy at their May 2016 meeting.

38573 Laparoscopy, surgical; with bilateral total pelvic lymphadenectomy and peri-aortic lymph node sampling, peritoneal washings, peritoneal biopsy(s), omentectomy, and diaphragmatic washings, including biopsy(s) when performed
The RUC reviewed the survey data from 65 gynecology and oncology physician providers and recommends the survey 25th percentile work RVU of 20.00. The RUC recommends the following physician time: pre-service time of 68 minutes, intra-service
time of 180 minutes, and immediate post-service time of 30 minutes with a half day discharge day (0.5 – 99328) and two post-operative office visits (1 – 99213, 1 – 99214). The RUC compared this service to similar service 60650 Laparoscopy, surgical, with adrenalectomy, partial or complete, or exploration of adrenal gland with or without biopsy, transabdominal, lumbar or dorsal (work RVU=20.73, intra-service time of 180 minutes) and determined that both services have identical intra-service time and comparable physician work and should therefore be valued similarly. To validate a work RVU of 20.00, the RUC compared the survey code to top key reference code 38572 Laparoscopy, surgical; with bilateral total pelvic lymphadenectomy and peri-aortic lymph node sampling (biopsy), single or multiple (work RVU=15.60, intra-service time of 120 minutes) and noted that the reference code has lower intra-service time, and the survey respondents indicated that the survey code is somewhat to much more intense to perform, further justifying this valuation.

The RUC discussed the limited services with 010 day global periods and thus comparison to other major procedures with 010 global periods is difficult, however, the IWPUT is consistent with other major procedures. The typical patient has had a prior recent hysterectomy and the physician is concerned about injuring bowel and blood vessels while accessing the peritoneal cavity. Techniques such as an open approach (Hasson), or insertion of the verees needle and trocar in the left upper quadrant is considered. Additional adhesions are universally encountered, including inflammation related to the recent procedure. After development of appropriate spaces, and completion of the lymphadenectomy, the physician must bring the omentum into view. An omentectomy is challenging given the course of the transverse colon from the hepatic flexure to the splenic flexure. Attachments to the colon need to be taken down carefully to ensure the physician does not cause traumatic or thermal injury to the bowel. The lesser sac is eventually entered and then attachments just below the greater curvature of the stomach are taken down and the vessels sealed and cut. The physician must ensure avoidance of the vasculature in the splenic hilum as well as tearing of the splenic capsule. Finally, extraction of the omentum requires a larger incision than typically required for lymph nodes and hence a minilaparotomy is almost always necessary. Given the comparison codes and intensity of this service, the RUC determined the 25th percentile of the survey results accurately reflects the work of this service. The RUC recommends a work RVU of 20.00 for CPT code 38573.

Practice Expense:
The Practice Expense Subcommittee reviewed the recommended equipment for this procedure and agreed that it was not typical to have EQ170 light, fiberoptic headlight w-source. The Subcommittee agreed to add the standard exam light (EQ168). In addition, the pelvic exam pack supply item SA051 was added. The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.

Laparoscopic Total Hysterectomy (Tab 10)
George A. Hill, MD, Jon Hathaway, MD, Mitch Schuster, MD, Barbara Goff, MD and Mark Shahin, MD (ACOG)

The CPT Editorial Panel created a new code to describe the laparoscopic total hysterectomy for resection of malignancy at their May 2016 meeting.
58575 Laparoscopy, surgical, total hysterectomy for resection of malignancy (tumor debulking), with omentectomy including salpingo-oophorectomy, unilateral or bilateral when performed

The RUC reviewed the survey data from 44 gynecology and oncology physician providers and determined that the survey 25th percentile work RVU of 32.60 appropriately accounts for the work required to perform this service. The RUC recommends the following physician time: pre-service time of 73 minutes, intra-service time of 240 minutes, and immediate post-service time of 33 minutes with three post-operative visits (2 – 99213 and 1- 99214). To validate a work RVU of 32.60, the RUC compared the survey code to top key reference code 58548 Laparoscopy, surgical, with radical hysterectomy, with bilateral total pelvic lymphadenectomy and para-aortic lymph node sampling (biopsy), with removal of tube(s) and ovary(s), if performed (work RVU =31.63, intra-service time of 240 minutes) and noted that the reference code has the same intra-service time, and the survey respondents indicated that the survey code is somewhat to much more intense to perform, further justifying this valuation.

The RUC noted that this is an intense procedure with a complex patient. This patient has had advanced stage ovarian cancer and abdominal carcinomatosis now treated with neoadjuvant chemotherapy. Patients with advanced cancer, especially those who have received chemotherapy preoperatively, are more likely to be malnourished, anemic, immunocompromised and susceptible to infection, and at higher risk of venous thromboembolism. In addition, the procedure is challenging given the course of the transverse colon from the hepatic flexure to the splenic flexure. Attachments to the colon need to be taken down carefully to ensure there is no traumatic or thermal injury to the bowel. The RUC agreed with the specialty that this procedure is intense and has an appropriate IWPUT of 0.102. The RUC recommends a work RVU of 32.60 for CPT code 58575.

Practice Expense:

The Practice Expense Subcommittee reviewed the recommended equipment for this procedure and agreed that it was not typical to have EQ170 light, fiberoptic headlight w-source. The Subcommittee agreed to add the standard exam light (EQ168). In addition, two pelvic exam pack supply items SA051 were added. The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.

Visual Evoked Potential Testing (Tab 11)
David Glasser, MD (AAO)

In October 2015, AMA Staff assembled a list of all services with total Medicare utilization of 10,000 or more that have increased by at least 100% from 2008 through 2013. The RUC review this list and recommended that the specialty societies submit an action plan for January 2016 explaining the high volume growth. In January 2016, the RUC recommended to refer to CPT for May 2016 meeting to define a more specific delineation of test strategy relative to the clinical indication for the study. The specialty societies indicated they may recommend the elevation of Category III code 0333T to Category I. In May 2016, the CPT Editorial Panel revised codes 95930 and 0333T to differentiate visual evoked potential testing and added Category III code 0X66T.
95930 Visual evoked potential (VEP) checkerboard or flash testing, central nervous system except glaucoma, checkerboard or flash, with interpretation and report

The RUC reviewed the survey data from 36 ophthalmology physicians and optometric providers and determined that the current work RVU of 0.35 appropriately accounts for the work required to perform this service. The RUC discussed that the volume growth was likely related to miscoding of other tests using this code. The survey for revised CPT code 95930 resulted in the same physician time as currently. However, the specialty society recommended and the RUC agreed, that the pre-service and immediate post-service time should be reduced to reflect that this service is performed on the same day as an Evaluation and Management (E/M) visit. The RUC recommends the following physician time: pre-service time of 2 minutes, intra-service time of 10 minutes, and immediate post-service time of 2 minutes.

The RUC compared the surveyed code to top key reference code 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 of 10 minutes) and noted that the reference code has the same intra-service time, and the survey respondents indicated that the reference code is somewhat more intense to perform, further justifying this slightly lower valuation. The RUC also compared this service to MPC code 92082 Visual field examination, unilateral or bilateral, with interpretation and report; intermediate examination (eg, at least 2 isopters on Goldmann perimeter, or semiquantitative, automated suprathreshold screening program, Humphrey suprathreshold automatic diagnostic test, Octopus program 33) (work RVU=0.40, intra-service time of 8 minutes) and determined that these services both require similar physician work and time, thus validating the recommended work RVU. Of note, the specialty did not provide compelling evidence to increase the work RVU of this code so the recommendation is for maintenance of the current value, although it is less than the 25th percentile of the survey data. The RUC recommends a work RVU of 0.35 for CPT code 95930.

Practice Expense:
The Practice Expense Subcommittee reviewed the recommended direct PE inputs and made several modifications. First, it was determined that the clinical staff type was not typically an EEG tech (L047B) but rather a blend (COMT/COT/RN/CST, L038A). In addition, the Subcommittee added the proper exam chair in the equipment (chair with headrest, exam, reclining, EF008). Finally, it was noted that this code is commonly billed with an ophthalmology Evaluation and Management (E/M) service and any potential duplication was addressed. The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.

Injection for Knee Arthrography (Tab 12)
Matthew Grierson (AAPM&R), Kurt A. Schoppe, MD (ACR)

The RUC reviewed the extensive history of this procedure. It was first identified in April 2008 under the High Volume Growth screen. Since then, it has been identified by five additional screens and the volume has continued to grow. In the last ten years the utilization has gone from roughly 7,000 to over 130,000. At the February 2014 CPT Editorial Panel meeting the specialty societies submitted a Code Change Application
(CCA) to try and address the issue. The Panel approved editorial revisions replacing the term “procedure” for “of contrast.” This revision to the descriptor clarified that the correct use of 27370 is to describe the injection of contrast into the knee joint space for arthrography only. This change however has not stemmed the rise in utilization for this procedure.

The specialty societies explained that the high volume growth for this procedure is likely due to its being reported incorrectly as arthrocentesis or aspiration. The correct reporting of those services is CPT code 20610 Arthrocentesis, aspiration and/or injection, major joint or bursa (eg, shoulder, hip, knee, subacromial bursa); without ultrasound guidance (work RVU= 0.79). The RUC extensively discussed the appropriate options to address the rising inappropriate utilization of this procedure. The RUC noted that deleting this code and then bundling it into the arthrography base procedures would not be ideal because it would involve edits to over 70 codes. The RUC also discussed that this procedure could become an add-on code. However, the RUC came to agreement that this code should be referred to CPT for deletion and replacement with a new code. The members agreed that this is the most efficient way to stem the rising inappropriate volume. **The RUC recommends that CPT code 27370 be referred to the CPT Editorial Panel for deletion and be replaced with a new code.**

**Strapping Multi-Layer Compression (Tab 13)**

Timothy Tillo, DPM (APMA); Mathew Sideman, MD, FACS (SVS); Robert Zwolak, MD, FACS, Nadar Massarweh, MD, Charles Mabry, MD, FACS (ACS);

In the Final Rule for 2016 CMS re-ran the high expenditure services across specialties with Medicare allowed charges of $10 million or more. CMS identified the top 20 codes by specialty in terms of allowed charges, excluding 010 and 090-day global services, anesthesia and Evaluation and Management services and services reviewed since CY 2010. CPT code 29580 Strapping; Unna boot was identified via this screen and 29581 Application of multi-layer compression system; leg (below knee), including ankle and foot was added as part of this family of services.

At the April 2016 RUC meeting, the specialty societies indicated that the vignettes were flawed. The specialty societies submitted revised vignettes to the Research Subcommittee for approval. Additionally, the Research Subcommittee reviewed the instructional note about precision in time by the specialty societies. CMS also indicated that the family should include three codes for the upper arm, CPT codes 29582, 29583, and 29584. However, the RUC found that these codes are performed by different specialties than those involved in this code group. The RUC decided CPT codes 29582, 29583, and 29584 should be placed on the LOI for the October RUC meeting, in addition to CPT codes 29580 and 29581, so that appropriate specialties could opt in to survey them. The specialty societies did not consider these low volume services (29582-29584) as part of the same family and there was no interest by other specialty societies to survey these codes. CMS continued to question the review of 29584 as part of the family. The specialty societies reiterated that this is a separate body area/separate code family and did not express an interest in surveying these services.

**29580 Strapping; Unna boot**
The RUC reviewed the survey data from 93 podiatrists and surgeons and determined that the current work RVU of 0.55 appropriately accounts for the work required to perform
this service. The RUC recommends the following physician time: pre-service time of 7 minutes, intra-service time of 11 minutes, and immediate post-service time of 5 minutes. To validate a work RVU of 0.55, the RUC compared the survey code to top key reference code 29515 Application of short leg splint (calf to foot) (work RVU=0.73, intra-service time of 15 minutes) and noted that the survey code has slightly lower intra-service time, thus requiring slightly less physician work. In addition, the RUC compared the surveyed code to MPC codes 46600 Anoscopy; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure) (work RVU=0.55, intra-service time of 5 minutes) and 69210 Removal impacted cerumen requiring instrumentation, unilateral (work RVU=0.61, intra-service time of 10 minutes) and determined that both reference codes have similar physician time and work and provide appropriate magnitude estimation to the recommended value. The RUC recommends a work RVU of 0.55 for CPT code 29580.

29581 Application of multi-layer compression system; leg (below knee), including ankle and foot

Compelling Evidence:
The RUC discussed compelling evidence for CPT code 29581. Code 29581 Application of multi-layer venous wound compression system, below knee was approved for CPT 2010. The service was surveyed in April 2009 by SVS, ACS, APMA, and APTA and following review of a robust survey, the RUC recommended the survey 25th percentile work RVU of 0.60 (compared to Unna boot work RVU of 0.55). In the Final Rule for 2010, CMS agreed with the RUC recommendation. In February 2010, a device manufacturer requested modification of code 29581 to remove reference to venous wound. They indicated that multilayer compression systems are used for other purposes including edema. In June 2010, the CPT Editorial Panel accepted the device manufacturer revised proposal, including creation of new codes 29582, 29583, and 29584. Since the revision to 29581 was editorial and the code was just surveyed in 2009, only the new codes (29582, 29583, 29584) were surveyed and only by the American Physical Therapy Association. The survey results were reviewed by the HCPAC. Very few responses were obtained (14-19) and for 2 codes, the median experience was zero. The rationale in the RUC database indicates that the HCPAC considered the society recommended times and crosswalks to physical therapy codes that are time based (i.e., each 15 minutes).

Flawed methodology in previous valuation:
In the Final Rule for 2012, CMS accepted the HCPAC recommendations for 29582, 29583, and 29584, which were based on expert panel crosswalk recommendations. Further, CMS determined that code 29581 should be relative to these three codes and CMS reduced the work RVU for 29581 from 0.60 to 0.25, which resulted in a negative IWPUT (-0.0013).

Given the history of Unna boot and the previous robust survey of 29581, the specialty societies indicated that the CMS work RVU reduction for 29581 was based on a flawed methodology. The RUC approved that this code met the requirements for compelling evidence based on the previous valuation method being flawed.

The RUC reviewed the survey data from 89 podiatrists and surgeons for CPT code 29581 and determined that the current work RVU of 0.60, which is lower than the survey 25th percentile, appropriately accounts for the work required to perform this service. The RUC recommends the following physician time: pre-service time of 7 minutes, intra-service time of 13 minutes, and immediate post-service time of 5 minutes. To validate a work
RVU of 0.60, the RUC compared the survey code to top key reference code 29405 *Application of short leg cast (below knee to toes)*; (work RVU =0.80, intra-service time of 15 minutes) and noted that the survey code has slightly lower intra-service time, and the survey respondents indicated that the survey code is identical to somewhat more intense to perform, further justifying this valuation.

The RUC also compared the surveyed code to the second key reference service 29515 *Application of short leg splint (calf to foot)* (work RVU=0.73, intra-service time of 15 minutes) and determined that since the reference code has slightly more intra-service time, it should be valued higher. The RUC also compared the surveyed service to MPC code 69210 *Removal impacted cerumen requiring instrumentation, unilateral* (work RVU=0.61, intra-service time of 10 minutes), and noted that while code 29581 has slightly more intra-service time, this MPC code is a more intense procedure and it accurately valued nearly identical to the survey code. **The RUC recommends a work RVU of 0.60 for CPT code 29581.**

**Practice Expense:**
The Practice Expense Subcommittee reviewed the recommended direct PE inputs and noted that the current clinical staff time to assist the physician in performing the procedure is less than the physician intra-service time for both codes. However, now both codes will match the intra-service time. The specialties explained that the current time is in error. The staff is assisting the physician throughout the entire procedure including removal of the strapping and during the patient evaluation and strapping procedure. The PE Subcommittee agreed that this was appropriate.

In addition, there were several modifications made to the specialty recommendations. First, 7 minutes for the staff to remove the multilayer compression system was moved from the post-service period to the service period for both codes. Second, all the minutes for conducting phone calls were removed for both codes so as not to be duplicative. Finally, various minor edits were made to the supplies and equipment to match the typical encounter. The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.

**Resection Inferior Turbinate (Tab 14)**
**Peter Manes, MD (AAOHNS)**

In October 2015, AMA staff re-ran the Harvard valued codes with utilization over 30,000 based on 2014 Medicare claims data and this service was identified. The RAW determined that this service will be placed on the next level of interest form to survey. In April 2016, the RUC recommended an interim work RVU of 3.57 for CPT code 30140. The RUC noted that because this service has a negative IWPUT and the post-operative visits were highly variable, it should be considered as a 000-day global period. The specialty society agreed with this conversion to a 000 global as they felt it would have more relativity across the fee schedule with the modified global, and the code was resurveyed for October 2016.

**30140 Submucous resection inferior turbinate, partial or complete, any method**
The RUC reviewed the survey responses from 117 otolaryngologists and determined that the survey median work RVU of 3.00 appropriately accounts for the work required to perform this service. The RUC recommends 30 minutes evaluation, 3 minutes positioning and 10 minutes scrub/dress/wait pre-service time, 20 minutes intra-service time and 15
immediate post-service time. The RUC compared the surveyed service to the top key reference service 31238 Nasal/sinus endoscopy, surgical; with control of nasal hemorrhage (work RVU = 2.74 and 25 minutes intra-service time) and similar service 31240 Nasal/sinus endoscopy, surgical; with concha bullosa resection (work RVU = 2.61 and 20 minutes intra-service time) and agreed that the survey code is more intense and requires more physician work. The reference code 31238 involves addressing one bleeding site and the challenge is to identify the site but once identified the physician applies cautery to the area. The other reference code 31240, involves a concha bullosa which is the middle turbinate with a big air pocket. However, there is little chance that the physician will over or under resect as it is very clear on what needs to be removed. Whereas, CPT code 30140 requires an incision at the anterior part of the inferior turbinate and to raise a tunnel in between the bone and the mucosa; it is difficult not to tear the mucosa and if torn leads to more bleeding and longer healing time. The physician removes the bone and the turbinate, if too little bone is removed than the procedure is not successful and the patient continues to have obstruction. If the physician removes too much bone, then the patient will have excessive loss of nasal structure and a feeling of constant nasal congestion which is irreversible. The RUC agreed that these differences account for the added intensity to perform 30140 compared to these similar services.

RUC also reviewed the secondary key reference service 43213 Esophagoscopy, flexible, transoral; with dilation of esophagus, by balloon or dilator, retrograde (includes fluoroscopic guidance, when performed) (work RVU = 4.73 and 45 minutes intra-service time) and noted that the respondents appropriately valued 30140 lower than to 43213 as the survey code requires less physician work and time to complete. The RUC also questioned the difference in physician work and intensity of similar service 31295 Nasal/sinus endoscopy, surgical; with dilation of maxillary sinus ostium (eg, balloon dilation), transnasal or via canine fossa (work RVU = 2.70 and 20 minutes intra-service time) compared to 30140 as they both require the same intra-service time. The specialty society noted, and the RUC agreed, that CPT code 30140 includes the actual removal of tissue and is more intense whereas for CPT code 31295 a balloon is placed in the maxillary sinus ostium and is dilated, it does not include any removal of tissue and therefore less intense. The RUC recommends a work RVU of 3.00 for CPT code 30140.

Practice Expense

The Practice Expense Subcommittee noted that this service is reported with CPT code 30520 64% of the time and is subject to the Multiple Procedure Payment Reduction (MPPR) and therefore justified the pre-service time now that it is a 000-day global. The PE Subcommittee removed 3 minutes in the non-facility setting for the coordination of pre-surgery services, deleted additional time to clean the hand-piece and blade as that is considered regular cleaning equipment time, revised the error in the number of supplies for tubing and canister, deleted time for cleaning sterilizer and autoclave system and corrected equipment minutes in correlation to clinical staff time. The RUC recommends the modifications as recommended by the Practice Expense Subcommittee.

Tracheostomy (Tab 15)
Peter Manes, MD (AAOHNS); Charles Mabry, MD, FACS; Nader Massarweh, MD (ACS)

In the Final Rule for 2016 CMS re-ran the high expenditure services across specialties with Medicare allowed charges of $10 million or more. CMS identified the top 20 codes
by specialty in terms of allowed charges, excluding 010 and 090-day global services, anesthesia and Evaluation and Management services and services reviewed since CY 2010. Code 31600 was identified through this screen and codes 31601, 31603, 31605, and 31610 were added as family codes for survey.

**31600 Tracheostomy, planned (separate procedure);**
The RUC reviewed the survey results from 66 general surgeons and otolaryngologists and determined that the survey 25th percentile work RVU of 5.56, lower than the current value, appropriately accounts for the work required to perform this service. The RUC recommends 40 minutes of pre-service evaluation, 10 minutes of pre-service positioning, 10 minutes of pre-service scrub/dress/wait, 30 minutes of intra-service time and 30 minutes of immediate post-operative time.

The RUC compared the surveyed code to the top two key reference services 32608 *Thoracoscopy; with diagnostic biopsy(ies) of lung nodule(s) or mass(es) (eg, wedge, incisional), unilateral* (work RVU = 6.84 and intra-service time of 60 minutes) and 43210 *Esophagogastroduodenoscopy, flexible, transoral; with esophagogastic fundoplasty, partial or complete, includes duodenoscopy when performed* (work RVU = 7.75 and intra-service time of 60 minutes) and agreed that the survey respondents valued this service lower as it requires less physician work and time to perform, but is more intense and complex. Performing a tracheotomy carries the risk of serious complications including bleeding, damage to the trachea, subcutaneous emphysema, pneumothorax, and hematoma, any of which can compromise continued breathing and patient survival.

The RUC compared 31600 to MPC code 52352 *Cystourethroscopy, with ureteroscopy and/or pyeloscopy; with removal or manipulation of calculus (ureteral catheterization is included)* (work RVU = 6.75 and 45 minutes intra-service time) and agreed that a work RVU of 5.56 for 31600 correctly accounts for less intra-operative time, but greater intensity and complexity, as the RUC noted that 52352 was an endoscopic outpatient procedure on an otherwise healthy individual. Finally, the RUC reviewed the relative intra-operative intensity to other recently reviewed codes with similar intensity and agreed that 31600 was relatively as intense and complex. For additional support the RUC referenced comparable services 34834 *Open brachial artery exposure to assist in the deployment of aortic or iliac endovascular prosthesis by arm incision, unilateral* (work RVU = 5.34 and 30 minutes intra-service time) and 35476 *Transluminal balloon angioplasty, percutaneous; venous* (work RVU = 5.10 and 35 minutes intra-service time.

The RUC recommends a work RVU of 5.56 for CPT code 31600.

**31601 Tracheostomy, planned (separate procedure); younger than 2 years**

*Compelling Evidence*
The specialty societies presented compelling evidence that the value for code 31601 was based on a flawed methodology. The specialty societies informed the RUC that Harvard reviewed code 31601 as a 090-day global code. In that study, the intra-operative work estimates were provided by only ten general otolaryngologists and the pre-and post-operative work were computed by algorithm. The specialty societies also noted that the 1992 Medicare Physician Payment Schedule indicated a 090-day global period for 31601 with a footnote that the work RVU was “gap-filled” by CMS. In the 1993 Medicare Physician Payment Schedule, the global period was changed to 000-day and the work RVU reduced without resurvey and without any discussion in the Federal Register text. The specialty societies further noted that, during the first five-year-review in 1995, a
comment was made to CMS that the intra-operative work of 31601 was under valued and the code was surveyed. However, in 1995, the society did not have the history of the CMS global period changes and “gap fill” changes in valuation for this low volume procedure. Therefore, the RUC concluded that the patient population and procedure had not changed since the Harvard review and the Harvard work RVU was maintained. The rejected survey data were entered into the RUC database several years later and were marked “do not use to validate for physician work” because the surveyed physician time did not correspond to the Harvard work RVU that the RUC maintained. The RUC accepted the compelling evidence of flawed methodology as presented.

The RUC reviewed the survey results from 33 otolaryngologists and determined that the median work RVU of 8.00 appropriately accounts for the work required to perform this service. The RUC recommends 40 minutes of pre-service evaluation, 10 minutes of pre-service positioning, 10 minutes of pre-service scrub/dress/wait, 45 minutes of intra-service time and 30 minutes of immediate post-operative time.

The RUC compared the surveyed code to the top two key reference services 43274 Endoscopic retrograde cholangiopancreatography (ERCP); with placement of endoscopic stent into biliary or pancreatic duct, including pre- and post-dilation and guide wire passage, when performed, including sphincterotomy, when performed, each stent (work RVU = 8.58 and intra-service time of 68 minutes) and 43210 Esophagogastroduodenoscopy, flexible, transoral; with esophagogastric fundoplasty, partial or complete, includes duodenoscopy when performed (work RVU = 7.75 and intra-service time of 60 minutes) and agreed that this service is appropriately valued as it requires less time to perform but is more intense and complex. Performing a tracheotomy carries the risk of serious complications including bleeding, damage to the trachea, subcutaneous emphysema, pneumothorax, and hematoma, any of which can compromise continued breathing and survival. In addition, performing a tracheostomy in pediatric patients has added difficulty because a child's neck is anatomically different from an adult's neck in the following ways: The dome of the pleura extends into the neck and is thus vulnerable to injury. The trachea is pliable and can be difficult to palpate. The neck is short, and there is significantly less working space. The cricoid can be injured if it is not correctly identified. The RUC also determined that a work RVU of 8.00 for 31601 appropriately ranked relative to 31600, as 31601 is performed on a pediatric patient and is significantly more intense and complex and requires more physician time.

The RUC also agreed that code 31601 was more intense and complex than MPC code 52353 Cystourethroscopy, with ureteroscopy and/or pyeloscopy; with lithotripsy (ureteral catheterization is included) (work RVU = 7.50 and 60 minutes intra-service time) which includes a low intensity diagnostic endoscopy prior to a therapeutic procedure and which is an outpatient procedure on otherwise healthy patients. Finally, the RUC reviewed the relative intra-operative intensity to other recently reviewed codes with similar intensity and agreed that 31601 was relatively as intense/complex. The RUC recommends a work RVU of 8.00 for CPT code 31601.

31603 Tracheostomy, emergency procedure; transtracheal

Compelling Evidence

The specialty societies presented compelling evidence that the value for code 31603 was based on a flawed methodology. The specialty societies informed the RUC that Harvard obtained estimates from both otolaryngologists and thoracic surgeons as a 090-day global code, however thoracic surgeons are not a primary provider of this service (less than 2%)
and general surgeons (29%) were not included in the review. In addition, prior to implementation of the 1992 Medicare Physician Payment Schedule, the global period was changed from 090-day to 000-day and the work RVU reduced without any discussion in the Federal Register text. The specialty societies further noted that, during the first five-year-review in 1995, a comment was made to CMS that the intra-operative work of 31603 was under valued and the code was surveyed. However, in 1995, the society did not have the history of the CMS global period changes and “gap fill” changes in valuation for this low volume procedure. Therefore, the RUC concluded that the patient population and procedure had not changed since the Harvard review and the Harvard work RVU was maintained. The rejected survey data were entered into the RUC database several years later and were marked “do not use to validate for physician work” because the surveyed physician time did not correspond to the Harvard work RVU that the RUC maintained. The RUC accepted the compelling evidence of flawed methodology as presented.

The RUC reviewed the survey results from 61 general surgeons and otolaryngologists and determined that the survey 25\textsuperscript{th} percentile work RVU of 6.00 appropriately accounts for the work required to perform this service. The RUC recommends 30 minutes of pre-service evaluation, 5 minutes of pre-service positioning, 10 minutes of pre-service scrub/dress/wait, 30 minutes of intra-service time and 30 minutes of immediate post-operative time.

Although both 31603 and 31600 are both intense procedures, the RUC noted code 31603 is relatively more intense than a planned tracheostomy, code 31600. The RUC compared code 31603 to the top two key reference services 43274 Endoscopic retrograde cholangiopancreatography (ERCP); with placement of endoscopic stent into biliary or pancreatic duct, including pre- and post-dilation and guide wire passage, when performed, including sphincterotomy, when performed, each stent (work RVU = 8.58 and intra-service time of 68 minutes) and 32608 Thoracoscopy; with diagnostic biopsy(ies) of lung nodule(s) or mass(es) (eg, wedge, incisional), unilateral (work RVU = 6.84 and intra-service time of 60 minutes) and agreed that 31603 requires less physician time to perform, but is more intense and complex. Performing a tracheostomy carries the risk of serious complications including bleeding, damage to the trachea, subcutaneous emphysema, pneumothorax, and hematoma, any of which can compromise continued breathing and survival. Furthermore, in this case, the airway is not secured during the performance of the procedure, increasing the intensity and complexity. For additional support the RUC referenced comparable services 34834 Open brachial artery exposure to assist in the deployment of aortic or iliac endovascular prosthesis by arm incision, unilateral (work RVU = 5.34 and 30 minutes intra-service time); 36222 elective catheter placement, common carotid or innominate artery, unilateral, any approach, with angiography of the ipsilateral extracranial carotid circulation and all associated radiological supervision and interpretation, includes angiography of the cervicocerebral arch, when performed (work RVU = 5.53 and 40 minutes intra-service time) and MPC code 52352 Cystourethroscopy, with ureteroscopy and/or pyeloscopy; with removal or manipulation of calculus (ureteral catheterization is included) (work RVU 6.75 and 45 minutes intra-service time) and agreed that a work RVU of 6.00 for 31603 correctly accounted for less intra-operative time, but greater intensity and complexity, as the RUC noted that 52352 was an endoscopic outpatient procedure on an otherwise healthy individual and 36222, a percutaneous procedure, was also performed most often as outpatient and 11% in the office and did not carry the risks and intensity of 31603. Finally, the RUC reviewed the relative intra-operative intensity to other recently
reviewed codes with similar intensity and agreed that 31603 was relatively as intense and complex. **The RUC recommends a work RVU of 6.00 for CPT code 31603.**

**31605 Tracheostomy, emergency procedure; cricothyroid membrane**

**Compelling Evidence**
The specialty societies presented compelling evidence that the value for code 31605 was based on a flawed methodology. The specialty societies informed the RUC that Harvard obtained estimates from 10 otolaryngologists only for intraoperative time. General surgeons and other providers of the service were not included in the review. The specialties also indicated that Harvard work estimates and the proposed rule for the 1992 Medicare Physician Payment Schedule indicated code 31605 was a 000-day global code with a proposed work RVU of 5.57 (FR 06/05/91). Prior to implementation of the Final Rule for the first payment schedule, it appears that code 31605 was treated as if it were reviewed as a 090-day global code similar to codes 31601 and 31603 and then reduced to 3.77 as a 000-day global code (FR 11/25/91) without any discussion in the Federal Register text. The RUC accepted the compelling evidence of flawed methodology as presented.

The survey was sent to a random selection of 1,802 surgeons from the AAO-HNS and ACS membership database. Responses were obtained from 56 surgeons; however the median experience was zero. This was not unexpected as this procedure is rarely performed. The survey data was significantly different between respondents who had experience and respondents without experience. After significant discussion, the RUC agreed that the recommendation should be based on the summary data from the experienced providers. The RUC reviewed the survey results from the 20 respondents with experience preforming this very low volume service in the past 12 months and agreed that the survey 25th percentile work RVU of 6.45 accurately accounts for the work required to perform this procedure.

The RUC recommends 15 minutes of pre-service evaluation, 3 minutes of pre-service positioning, 5 minutes of pre-service scrub/dress/wait, 20 minutes of intra-service time and 21 minutes of immediate post-operative time. The RUC compared the surveyed code to the top two key reference services 43274 *Endoscopic retrograde cholangiopancreatography (ERCP); with placement of endoscopic stent into biliary or pancreatic duct, including pre- and post-dilation and guide wire passage, when performed, including sphincterotomy, when performed, each stent (work RVU = 8.58 and intra-service time of 68 minutes)* and 32608 *Thoracoscopy; with diagnostic biopsy(ies) of lung nodale(s) or mass(es) (eg, wedge, incisional), unilateral (work RVU = 6.84 and intra-service time of 60 minutes)* and agreed that the intra-service work intensity of 31605 (IWPUT=0.277) is significantly more intense and complex than both of these services. The RUC noted that the intensity of 31605 is more comparable to the intensity for 31500 *Intubation, endotracheal, emergency procedure* (Feb 2016 for CY 2017 RUC recommended work RVU=3.00, intra-service time of 10 minutes and IWPUT=0.252).

**The RUC recommends a work RVU of 6.45 for CPT code 31605.**

**31610 Tracheostomy, fenestration procedure with skin flaps**

**Valuation History - CPT cycle 2018**

In April 2016, the RUC noted that the recommendation for 31610 had a negative IWPUT, should be reclassified as a 000-day global and resurveyed for October 2016. The RUC also considered that the CPT Editorial Panel may need to create a new code to describe changing the tracheostomy tube in the office. The RUC noted that the specialty did not
need to resurvey the entire family of codes. In June 2016, AAO-HNS and ACS appealed the interim recommendation and change to the global period because: 1) a negative IWPUT should not be the primary criteria to change a global period. CPT code 31610 is a major surgery and is appropriately classified as a 090-day global period. Additionally, the post-operative work is stable and the level and physician work was specifically outlined in the rationale for the April 2016 meeting; and 2) there is compelling evidence that the original valuation was flawed. First, the Harvard methodology algorithm used to assign postoperative hospital and office visits underestimated the level of postoperative work required and therefore underestimated the relative work RVU. Second, the previous Harvard physician intra-service time of 61 minutes was computed by an algorithm. The initial Harvard review indicated the intra-operative time was 52 minutes, but then finalized the time at 61 minutes, without any rationale for this change.

AAO-HNS and ACS requested that the RUC maintain the current 090-day global period and reconsider compelling evidence. The Committee noted that, while the RUC will submit the specialties’ recommendations for the global period to CMS, the Agency makes the ultimate global period assignment. The Committee indicated concern that if this service was changed to a 000-day global period that direct practice expense activities associated with the care of the tracheostomy in the post-operative care would be lost.

A RUC Ad Hoc Appeals Committee unanimously recommended that the RUC reconsider its recommendation for CPT code 31610. The Committee unanimously agreed that there is compelling evidence that the previous valuation was flawed. The Committee supports the specialty society recommendation for a 090-day global period assignment though that recommendation was not unanimous. The Committee determined that the work RVU should be discussed by the entire RUC and anticipated more information from the specialty societies to foster discussion regarding the compelling evidence that the original valuation was flawed.

**RUC Review – October 2016**

In October 2016, the specialty societies presented compelling evidence that that the previous valuation of 31610 was flawed. The RUC noted that the previous Harvard physician intra-service time of 61 minutes was computed by an algorithm. The Phase III Harvard Study report indicated the intra-operative surveyed time was 52 minutes, but the Final Harvard report indicated 61 minutes, without any additional surveys, discussion or rationale for this change. The specialty societies also noted that the Harvard postoperative visit times were transformed into low level hospital and office visits and were not surveyed, but developed by an algorithm as well. These low level visits resulted in undervaluation of the work RVU. The RUC agreed that due to the multiple unexplained issues in the original valuation, there is compelling evidence that the Harvard methodology was flawed for CPT code 31610.

The RUC reviewed the survey results from 94 general surgeons and otolaryngologists and recommends the survey 75th percentile work RVU of 12.00 and 40 minutes of pre-service evaluation, 10 minutes of pre-service positioning, 10 minutes of pre-service scrub/dress/wait, 45 minutes of intra-service time, 20 minutes of immediate post-operative time, 2-99231 subsequent hospital care visits, 1-99232 subsequent hospital care visit, 1-99233 subsequent hospital care visit, 1-99238 discharge day management and 3-99213 office visits. The RUC agreed that the 99232 visit is typically the first inpatient post-operative visit and is more intense and complex than the two 99231 visits because the physician is checking for significant complications such as pneumothorax.
subcutaneous crepitus and subcutaneous emphysema. The 99231 visits are to evaluate the skin flaps for viability and make sure there is no infection. The 99233 service is typically 4-5 days after the procedure and is the most intense visit because it includes changing the tracheostomy, taking out sutures, removing the tracheostomy, inspecting the area and inserting a new tracheostomy into the stoma. Further, the RUC agreed that 3-99213 office visits are appropriate in order to examine the patient, inspect the larynx, remove the tracheostomy, examine stoma and skin flaps, replace the tracheostomy, cauterize any granulation tissue at the stoma, answer patient/family questions, assess for adequacy of pain control and discuss proper maintenance of the tracheostomy including stomal care.

The RUC noted that the negative IWPUT at the current value is an indication that this service is not valued correctly. Although, the survey respondents analyzed the intra-service work appropriately they may have underestimated the post-service work. Therefore, the RUC recommends the survey 75% percentile work RVU of 12.00 appropriately accounts for the total physician work required for this service. The RUC compared the surveyed code to similar services 66183 Insertion of anterior segment aqueous drainage device, without extraocular reservoir, external approach (work RVU = 13.20 and intra-service time of 45 minutes) and noted that the physician work and time is appropriately relative to this similar service. The RUC referenced CPT code 27027 Decompression fasciotomy(ies), pelvic (buttock) compartment(s) (eg, gluteus medius-minimus, gluteus maximus, iliopsoas, and/or tensor fascia lata muscle), unilateral (s) (work RVU = 13.04 and intra-service time of 60 minutes) noting that the physician work and post-operative work is similar for 31610 and supports the recommendation. The RUC recommends a work RVU of 12.00 for CPT code 31610.

**Practice Expense:**
CPT codes 31603 and 31605 were identified by the PE Subcommittee as emergent procedures and no practice expense direct inputs were requested for these two services. For CPT code 31610, the RUC recommends the 090-global direct practice expense inputs with minor modifications for additional supplies and equipment that are not standard to Evaluation and Management services.

**RUC Database Flag**
The RUC recommends to flag CPT codes 31605 and 31610 as “do not use” for validation of work as 31605 physician time and work recommendations are based on only the 20 survey respondents who performed this service in the past 12 months and 31610 recommendation was based on the survey 75th percentile work RVU.

**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.

**Insertion of Catheter (Tab 16)**
Marc Leib, MD, Richard Rosenquist, MD (ASA); Kurt A. Schoppe, MD (ACR)

In the Final Rule for 2016 CMS re-ran the high expenditure services across specialties with Medicare allowed charges of $10 million or more. CMS identified the top 20 codes by specialty in terms of allowed charges, excluding 010 and 090-day global services, anesthesia and Evaluation and Management services and services reviewed since CY 2010. Prior to the January 2016 RUC meeting, the specialty societies notified the RUC
that CPT code 36556 Insertion of non-tunneled centrally inserted central venous catheter; age 5 years or older (work RVU=2.50) was to be reviewed by the RUC at the October 2016 meeting. The specialty requested that codes 93503 Insertion and placement of flow directed catheter (e.g., Swan-Ganz) for monitoring purposes (work RVU=2.91) and 36620 Arterial catheterization or cannulation for sampling, monitoring or transfusion (separate procedure); percutaneous (work RVU=1.15) be postponed to the October 2016 meeting so that they could survey all three codes together. The RUC recommended deferring CPT codes 36556, 93503, and 36620 to the October 2016 RUC meeting. The family was expanded to include CPT code 36555 Insertion of non-tunneled centrally inserted central venous catheter; younger than 5 years of age (work RVU=2.68).

36555 Insertion of non-tunneled centrally inserted central venous catheter; younger than 5 years of age
The RUC reviewed the survey results from 40 anesthesiologists and recommends the following physician time components: pre-service time of 23 minutes, intra-service time of 15 minutes and immediate post-service time of 10 minutes.

The RUC reviewed the survey respondents’ estimated work RVU values and agreed with the specialty society that the respondents did not adequately account for the increased complexity of the physician work involved in this pediatric code 36555 compared to the adult code 36556. While both services have the same intra-service time, there is increased risk of nerve or arterial injury due to the limited space in a child. Therefore, the RUC reviewed the current increment between these two codes (0.18) and agreed that this value accurately captures the intensity difference. The RUC added the increment of 0.18 to the recommended work RVU of 1.75 for CPT code 36556 to arrive at a recommended work RVU of 1.93 for CPT code 36555. To justify a work RVU of 1.93, the RUC compared the surveyed code to CPT code 54150 Circumcision, using clamp or other device with regional dorsal penile or ring block (work RVU= 1.90, intra time= 15 minutes) and agreed that these two services have nearly identical physician time and should be valued similarly. The RUC also reviewed CPT code 49451 Replacement of duodenostomy or jejunostomy tube, percutaneous, under fluoroscopic guidance including contrast injection(s), image documentation and report (work RVU= 1.84, intra time= 15 minutes) and agreed that this service, with identical intra time and analogous work, also provided support that the recommended value is accurate. The RUC recommends a work RVU of 1.93 for CPT code 36555.

36556 Insertion of non-tunneled centrally inserted central venous catheter; age 5 years or older
The RUC reviewed the survey results from 141 anesthesiologists and radiologists and recommends the following physician time components: pre-service time of 20 minutes, intra-service time of 15 minutes and immediate post-service time of 5 minutes.

The RUC reviewed the survey respondents’ estimated work RVU values and agreed that the 25th percentile work RVU of 1.75 is appropriate for this code. To justify a work RVU of 1.75, the RUC compared the surveyed code to several 000-day global codes with identical intra-service time: CPT code 64461 Paravertebral block (PVB) (paraspinous block), thoracic; single injection site (includes imaging guidance, when performed) (work RVU= 1.75), 64483 Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or CT); lumbar or sacral, single level (work RVU= 1.90), and 53855 Insertion of a temporary prostatic urethral stent,
including urethral measurement (work RVU= 1.64). The RUC agreed that the recommended work RVU of 1.75 accurately placed code 36556 in the range of these similar services. **The RUC recommends a work RVU of 1.75 for CPT code 36556.**

36620 Arterial catheterization or cannulation for sampling, monitoring or transfusion (separate procedure); percutaneous
The RUC reviewed the survey results from 101 anesthesiologists and radiologists and recommends the following physician time components: pre-service time of 7 minutes, intra-service time of 7 minutes and immediate post-service time of 3 minutes.

The RUC reviewed the survey respondents’ estimated work RVU values and agreed that the 25th percentile work RVU of 1.00 is appropriate for this code. To justify a work RVU of 1.00, the RUC compared the surveyed code to the top key reference service 64450 Injection, anesthetic agent; other peripheral nerve or branch (work RVU= 0.75, intra time= 5 minutes) and noted that code 36620 has more intra-service time and additional complexity compared to the reference code and is justifiably valued higher. The RUC also reviewed codes 31231 Nasal endoscopy, diagnostic, unilateral or bilateral (separate procedure) (work RVU= 1.10) and 64405 Injection, anesthetic agent; greater occipital nerve (work RVU= 0.94) and agreed that both these analogous codes provide additional support to the recommended value. **The RUC recommends a work RVU of 1.00 for CPT code 36620.**

93503 Insertion and placement of flow directed catheter (eg, Swan-Ganz) for monitoring purposes
The RUC reviewed the survey results from 76 anesthesiologists and radiologists and recommends the following physician time components: pre-service time of 12 minutes, intra-service time of 15 minutes and immediate post-service time of 10 minutes.

The RUC reviewed the survey respondents’ estimated work RVU values and agreed that the 25th percentile work RVU of 2.00 is appropriate for this code. To justify a work RVU of 2.00, the RUC compared the surveyed code to CPT codes 62318 Injection(s), including indwelling catheter placement, continuous infusion or intermittent bolus, of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, includes contrast for localization when performed, epidural or subarachnoid; cervical or thoracic (work RVU= 2.04, intra time= 15 minutes) and 69801 Labyrinthotomy, with perfusion of vestibuloactive drug(s), transcanal (work RVU= 2.06, intra time= 15 minutes) and agreed that both services have nearly identical physician time and support the recommended value. **The RUC recommends a work RVU of 2.00 for CPT code 93503.**

**Practice Expense:**
The RUC accepted the direct PE inputs as slightly modified 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.
Insertion of PICC Catheter (Tab 17)
Kurt A. Schoppe, MD (ACR); Michael Hall, MD, Jerry Niedzwiecki, MD (SIR)
Facilitation Committee #1

In the Final Rule for 2016, CMS re-ran the high expenditure services across specialties with Medicare allowed charges of $10 million or more. CMS identified the top 20 codes by specialty in terms of allowed charges, excluding 010 and 090-day global services, anesthesia and Evaluation and Management services and services reviewed since CY 2010. CPT code 36569 was identified as part of this screen. The specialty societies indicated they will survey these services for the October 2016 RUC meeting.

36569 Insertion of peripherally inserted central venous catheter (PICC), without subcutaneous port or pump; age 5 years or older
The RUC reviewed the survey results from 74 interventional and diagnostic radiologists and recommends the following physician time components: pre-service time of 19 minutes, intra-service time of 15 minutes and immediate post-service time of 10 minutes.

The RUC reviewed the survey respondents’ estimated physician work values and determined that, since the intra-service time decreased by 5 minutes, the work RVU should be lower than the current work RVU of 1.82. To find an appropriate work value, the RUC compared the surveyed code to CPT code 10035 Placement of soft tissue localization device(s) (eg, clip, metallic pellet, wire/needle, radioactive seeds), percutaneous, including imaging guidance; first lesion (work RVU= 1.70, intra time= 15 minutes) and agreed that these two services have nearly identical physician time components and should be valued the same. Therefore, the RUC agreed to directly crosswalk the physician work RVU of 1.70 from code 10035 to CPT code 36569. To further justify a work RVU of 1.70, the RUC reviewed CPT code 19285 Placement of breast localization device(s) (eg, clip, metallic pellet, wire/needle, radioactive seeds), percutaneous; first lesion, including ultrasound guidance (work RVU= 1.70, intra time= 15 minutes) and again agreed that with nearly identical physician time and analogous physician work, the surveyed code, 36569, should be valued the same as 19285. Finally, the RUC noted the increased intensity of this procedure since it was last value 13 years ago. The experts explained that previously this code was always provided by a radiologist. Now this service is only performed in cases where the nurse has failed in an initial attempt to insert the catheter and a physician is then required. This has increased the complexity of the typical patient seen by the physician and has, in parallel, caused the intensity of the overall procedure to increase. The RUC recommends a work RVU of 1.70 for CPT code 36569.

CPT Referral:
The RUC noted that CPT code 36569 is typically reported with codes 76937 Ultrasound guidance for vascular access requiring ultrasound evaluation of potential access sites, documentation of selected vessel patency, concurrent realtime ultrasound visualization of vascular needle entry, with permanent recording and reporting (work RVU= 0.30) and 77001 Fluoroscopic guidance for central venous access device placement, replacement (catheter only or complete), or removal (includes fluoroscopic guidance for vascular access and catheter manipulation, any necessary contrast injections through access site or catheter with related venography radiologic supervision and interpretation, and radiographic documentation of final catheter position) (work RVU= 0.38).
These codes are commonly reported together because the current code contains a bimodal clinical scenario. The first scenario is when a clinical staff member performs the procedure without imaging. The second scenario is when a radiologist performs the procedure with imaging guidance. Therefore, CPT code 36569 should be referred to the CPT Editorial Panel to have the two common imaging codes bundled into the code. The current coding language should remain for clinical staff, but a new bundled code should be created. CMS also noted two family codes should be added to the CCA: (36568 Insertion of peripherally inserted central venous catheter (PICC), without subcutaneous port or pump; younger than 5 years of age and 36584 Replacement, complete, of a peripherally inserted central venous catheter (PICC), without subcutaneous port or pump, through same venous access). The RUC recommends CPT codes 36569, 36568 and 36584 be referred to the CPT Editorial Panel.

**Relativity Assessment Workgroup Flag:**
Due to the different patient population and providers for CPT code 36569 after it undergoes CPT changes, the RAW should flag this procedure to monitor the utilization after two years of available data and review who are providing these services.

**RUC Database Flag:**
The RUC recommends this code receive a note in the RUC Database that it should not be used to validate for physician work.

**Practice Expense:**
The Practice Expense Subcommittee noted that CPT codes 77001 and 76937 are typically reported on the same day of service as 36569. Therefore, the Subcommittee asked the specialties to include a revised spreadsheet which included the current PE inputs for these two imaging codes and assessed whether or not there was duplication in clinical staff time between the codes. From this analysis, 2 minutes from **Prepare and position patient/monitor patient/set up IV** and 3 minutes from **Clean room/equipment by physician staff** were removed for code 36569. The RUC accepted the direct practice expense inputs as modified 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.

**Magnetic Resonance Angiography (MRA) Head (Tab 18)**
Kurt Schoppe, MD (ACR); Gregory Nicola, MD, Joshua Hirsch, MD (ASNR)

In the Final Rule for 2016, CMS re-ran the high expenditure services across specialties with Medicare allowed charges of $10 million or more. CMS identified the top 20 codes by specialty in terms of allowed charges, excluding 010 and 090-day global services, anesthesia and Evaluation and Management services and services reviewed since CY 2010. CPT code 70544 was identified as part of this screen.

During their RUC presentation, the specialty noted that MRA head and neck were last valued 16 years ago. The specialty noted and the RUC agreed that the assignment of RVUs during that valuation period was considered flawed methodology because the previous RVU assignment was not directly related to the surveyed times. However, the
current survey demonstrates similar intra-service times compared to 16 years ago. The major changes in time have occurred in the pre and post service periods, which given the flawed methodology determination and the relatively low intensity of pre-service and post-service time, is of dubious significance. The RUC agreed with the specialty that the newly proposed RVU values and physician times maintain relativity within the MRI family, throughout radiology, and across the physician payment schedule, and correlate with the current survey times.

70544 Magnetic resonance angiography, head; without contrast material(s)
The RUC reviewed the survey results from 50 radiologists and neuroradiologists and recommends the following physician time components: pre-service time of 5 minutes, intra-service time of 12 minutes and post-service time of 5 minutes.

This family of services is unique in the physics involved and how these sequences are obtained relative to most other MR services, including MRA of the Neck. Unlike much of MRI, where the post-contrast codes have multi-planar sequences that are sometimes matched and not matched to the pre-contrast, this is the exact same sequence as which is obtained in a pre-contrast study. This results in the code family’s rank order being distinct, where the step-up in value is not analogous to most other MR services.

The RUC reviewed the survey 25th percentile work RVU of 1.20 and agreed that the current value is appropriate for this service. To justify a work RVU of 1.20, the RUC compared the survey code to CPT code 74150 Computed tomography, abdomen; without contrast material (work RVU of 1.19, intra-service time of 12 minutes and total time of 20 minutes) and noted that both services have identical intra-service time and the survey code has somewhat more total time, supporting a slightly higher work RVU for the survey code. To further support a work RVU of 1.20, the RUC compared the survey code to 2nd key reference and MPC code 70470 Computed tomography, head or brain; without contrast material, followed by contrast material(s) and further sections (work RVU of 1.27, intra-service time of 15 minutes) and noted that the reference code has somewhat more intra-service and total time, justifying a somewhat lower RVU for the survey code. The RUC recommends a work RVU of 1.20 for CPT code 70544.

70545 Magnetic resonance angiography, head; with contrast material(s)
The RUC reviewed the survey results from 50 radiologists and neuroradiologists and recommends the following physician time components: pre-service time of 5 minutes, intra-service time of 12 minutes and post-service time of 5 minutes.

This family of services is unique in the physics involved and how these sequences are obtained relative to most other MR services, including MRA of the Neck. Unlike much of MRI, where the post-contrast codes have multi-planar sequences that are sometimes matched and not matched to the pre-contrast, this is the exact same sequence as which is obtained in a pre-contrast study. This results in the code family’s rank order being distinct, where the step-up in value is not analogous to most other MR services. This is the reason that the recommended values for 70544 and 70545 are identical.

The RUC reviewed the survey respondents estimated physician work and agreed with the specialty that maintaining the current work RVU of 1.20 is supported. To justify a work RVU of 1.20, the RUC compared the survey code to CPT code 74150 Computed tomography, abdomen; without contrast material (work RVU of 1.19, intra-service time of 12 minutes and total time of 20 minutes) and noted that both services have identical
intra-service time and the survey code has somewhat more total time, supporting a slightly higher work RVU for the survey code. To further support a work RVU of 1.20, the RUC compared the survey code to 2nd key reference and MPC code 70470 *Computed tomography, head or brain; without contrast material, followed by contrast material(s) and further sections* (work RVU of 1.27, intra-service time of 15 minutes) and noted that the reference code has somewhat more intra-service and total time, justifying a somewhat lower RVU for the survey code. The **RUC recommends a work RVU of 1.20 for CPT code 70545.**

**70546 Magnetic resonance angiography, head; without contrast material(s), followed by contrast material(s) and further sequences**

The RUC reviewed the survey results from 50 radiologists and neuroradiologists and recommends the following physician time components: pre-service time of 5 minutes, intra-service time of 15 minutes and post-service time of 5 minutes.

This family of services is unique in the physics involved and how these sequences are obtained relative to most other MR services, including MRA of the Neck. Unlike much of MRI, where the post-contrast codes have multi-planar sequences that are sometimes matched and not matched to the pre-contrast, this is the exact same sequence as which is obtained in a pre-contrast study. This results in the code family’s rank order being distinct, where the step-up in value is not analogous to most other MR services.

The RUC reviewed the survey 25th percentile and agreed that the survey respondents somewhat overvalued the physician work involved in performing this service. To arrive at an appropriate work RVU, the RUC compared the survey code to CPT Code 70551 *Magnetic resonance (eg, proton) imaging, brain (including brain stem); without contrast material* (work RVU of 1.48, intra-service time of 18 minutes, total time of 28 minutes) and noted that although the comparator code has slightly more intra-service and total time, the survey code describes a service with somewhat more intense physician work. Therefore, the RUC recommends a direct work RVU crosswalk between the survey code and CPT code 70551. To validate a work RVU of 1.48, the RUC compared the survey code to CPT code 95865 *Needle electromyography; larynx* (work RVU of 1.57, intra-service time of 15 minutes and total time of 31.5 minutes) and noted that both services have identical intra-service time and involve a similar amount of physician work, further supporting a work RVU of 1.48 for the survey code. The **RUC recommends a work RVU of 1.48 for CPT code 70546.**

**Practice Expense**

The Practice Expense Subcommittee reviewed the recommended direct PE inputs and made several modifications. First, the specialties noted that the current inputs for these codes incorrectly list an angio tech as the clinical staff. This was a typo, as it is typical to have an MR tech perform MR procedures. The Subcommittee agreed had had MR tech (L047A) inserted. Second, there were several supplies missing. An IV starter kit (SA019), non-sterile drape (SB006), a needle (SC029) and a syringe (SC053) were all added. The swab-pad, alcohol (SJ053) was removed, since one is included in the IV starter kit.

The Subcommittee discussed the clinical staff time required to acquire the images and why they don’t match the physician time. They must obtain clear images of the brain, with only a ghosting of the vessels “without contrast”, which is different to looking at a ghost of the brain with detail of the vessel for “with contrast”. Therefore, the differences
in clinical staff time were appropriate. Finally, the RUC discussed whether or not it was appropriate to have 7 minutes of obtain consent for the non-contrast code (70544) and 9 minutes for the “with contrast” codes (70545, 70546). The specialty societies explained that multiple activities occur in this single line item, including obtaining consent for the procedure, educating the patient about the MRI exam, and going through a safety checklist before the patient can enter the MRI room due to the strong magnetic field. Additionally, these patients have neurologic issues (e.g. aneurysm clips and strokes), so it takes longer to consent those patients. Also, there is a cage around the patient’s head, making the area much more constrained than other MR procedures. The patient is going deeper in the magnet, so there is more explanation needed as to what will be happening. The RUC reviewed an accepted the direct PE inputs as modified by 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.

Magnetic Resonance Angiography (MRA) Neck (Tab 19)
Kurt Schoppe, MD (ACR); Gregory Nicola, MD, Joshua Hirsch, MD (ASNR)

In the Final Rule for 2016, CMS re-ran the high expenditure services across specialties with Medicare allowed charges of $10 million or more. CMS identified the top 20 codes by specialty in terms of allowed charges, excluding 010 and 090-day global services, anesthesia and Evaluation and Management services and services reviewed since CY 2010. CPT code 70549 was identified as part of this screen.

Comparing this family of codes to MRA Head, the specialty clarified to the RUC that there is larger step-up in physician work for each code in the MRA neck family since the pre-contrast images are acquired using a totally different technique in the axial plane, whereas the post-contrast images are different technique in the coronal plane with bolus tracking. The field of view is larger on the post-contrast images and more structures are visualized and need to be evaluated, including the aorta and origin of the great vessels. Therefore, the work increment between each MRA neck code is greater.

During their RUC presentation, the specialty noted that MRA head and neck were last valued 16 years ago. The specialty noted and the RUC agreed that the assignment of RVUs during that valuation period was considered flawed methodology because the previous RVU assignment was not directly related to the surveyed times. However, the current survey demonstrates similar intraservice times compared to 16 years ago. The major changes in time have occurred in the pre and post service periods, which given the flawed methodology determination and the relatively low intensity of pre-service and post-service time, is of dubious significance. The RUC agreed with the specialty that the newly proposed RVU values and physician times maintain relativity within the MRI family, throughout radiology, and across the fee schedule, and correlate with the current survey times.

70547 Magnetic resonance angiography, neck; without contrast material(s)
The RUC reviewed the survey results from 37 radiologists and neuroradiologists and recommends the 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 reviewed the current value and survey 25th percentile work RVU of 1.20 and agreed that it is appropriate for this service. To justify a work RVU of 1.20, the RUC compared the survey code to 2nd Key Reference code 74150 Computed tomography, abdomen; without contrast material (work RVU of 1.19, intra-service time of 12 minutes and total time of 20 minutes) and noted that both services have identical intra-service time and the survey code has somewhat more total time, supporting a slightly higher work RVU for the survey code. To further support a work RVU of 1.20, the RUC compared 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 of 1.27, intra-service time of 15 minutes) and noted that the reference code has somewhat more intra-service and total time, justifying a somewhat lower RVU for the survey code. The RUC recommends a work RVU of 1.20 for CPT code 70547.

70548 Magnetic resonance angiography, neck; with contrast material(s)
Prior to reviewing the survey data for this service, the RUC considered compelling evidence that the current work RVU of 1.20 may be incorrect. The specialty presented a compelling evidence argument that a flawed methodology was used to value this service when it was last valued. CPT code 70548 previously received survey times of 10 minutes of preservice work, 15 minutes of intra-service work, and 10 minutes of post-service work. This is compared to previous survey times for 70547 of 5 minutes of preservice work, 10 minutes of intra-service work, and 10 minutes of post-service work. The RUC rationale from the time period explained assigning work RVU of 1.20 to the base code 70547 based on the survey, but for an unknown reason also assigned an identical work value of 1.20 for 70548 despite the surveyed time difference. Imaging codes in the same family with different intra-service times would typically have different work RVUs reflecting these time differences. Therefore, the societies expressed concern about the prior methodology not meeting current RUC standards. Given this information, the RUC approved compelling evidence that the current work value for CPT code 70548 may be incorrect.

The RUC reviewed the survey results from 37 radiologists and neuroradiologists and recommends the 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 reviewed the survey 25th percentile work RVU of 1.50 and agreed it is appropriate for this service. To justify a work RVU of 1.50, the RUC compared the survey code to CPT Code 70551 Magnetic resonance (eg, proton) imaging, brain (including brain stem); without contrast material (work RVU of 1.48, intra-service time of 18 minutes, total time of 28 minutes) and noted that although the comparator code has slightly more intra-service and total time, the survey code describes a service with somewhat more intense physician work. To further validate a work RVU of 1.50, the RUC compared the survey code to CPT code 95865 Needle electromyography; larynx (work RVU of 1.57, intra-service time of 15 minutes and total time of 31.5 minutes) and noted that both services have identical intra-service time and involve a similar amount of physician work, further supporting a work RVU of 1.50 for the survey code. The RUC recommends a work RVU of 1.50 for CPT code 70548.
70549 Magnetic resonance angiography, neck; without contrast material(s), followed by contrast material(s) and further sequences

The RUC reviewed the survey results from 37 radiologists and neuroradiologists and recommends the following physician time components: pre-service time of 5 minutes, intra-service time of 20 minutes and post-service time of 5 minutes.

The RUC reviewed the survey 25th percentile work RVU of 1.80 and agreed that the current value of 1.80 is appropriate for this service. To justify a work RVU of 1.80, the RUC compared the survey code to top key reference code 70498 Computed tomographic angiography, neck, with contrast material(s), including noncontrast images, if performed, and image postprocessing (work RVU of 1.75, intra-service time of 20 minutes, total time of 30 minutes) and noted that with identical times and 67 percent of the survey respondents ranking the survey code as being more intense/complex relative to the reference code, a slightly higher work RVU is justified for the survey code. To further support a work RVU of 1.80, the RUC compared the survey code to CPT code 70552 Magnetic resonance (eg, proton) imaging, brain (including brain stem); with contrast material(s) (work RVU of 1.78, intra-service time of 20 minutes, total time of 32 minutes) and noted that both services have identical intraservice times and similar total time, justifying a similar valuation. The RUC recommends a work RVU of 1.80 for CPT code 70549.

Practice Expense

The Practice Expense Subcommittee reviewed the recommended direct PE inputs and made several modifications. First, the specialties noted that the current inputs for these codes incorrectly list an angio tech as the clinical staff. This was a typo, as it is typical to have an MR tech perform MR procedures. The Subcommittee agreed and had MR tech (L047A) inserted. Second, there were several supplies missing. An IV starter kit (SA019), non-sterile drape (SB006), a needle (SC029) and a syringe (SC053) were all added. Finally, the intercom (EQ139) equipment was removed. The swab-pad, alcohol (SJ053) was removed, since one is included in the IV starter kit.

The Subcommittee discussed the clinical staff time required to acquire the images and why they don’t match the physician time. They must obtain clear images of the neck, with only a ghosting of the vessels “without contrast”, which is different to looking at a ghost of the neck with detail of the vessel for “with contrast”. Therefore, the differences in clinical staff time were appropriate. Finally, the RUC discussed whether or not it was appropriate to have 7 minutes of obtain consent for the non-contrast code (70547) and 9 minutes for the “with contrast” codes (70548, 70549). The specialty societies explained that multiple activities occur in this single line item, including obtaining consent for the procedure, educating the patient about the MRI exam, and going through a safety checklist before the patient can enter the MRI room due to the strong magnetic field. Additionally, these patients have neurologic issues (e.g. aneurysm clips and strokes), so it takes longer to consent those patients. Also, there is a cage around the patient’s head, making the area much more constrained than other MR procedures. The patient is going deeper in the magnet, so there is more explanation needed as to what will be happening. The RUC reviewed an accepted the direct PE inputs as modified by Practice Expense Subcommittee.
MRI Lower Extremity (Tab 20)
Kurt Schoppe, MD, Daniel Wessell, MD, Jonathan Flug, MD (ACR)

In the Final Rule for 2016, CMS re-ran the high expenditure services across specialties with Medicare allowed charges of $10 million or more. CMS identified the top 20 codes by specialty in terms of allowed charges, excluding 010 and 090-day global services, anesthesia and Evaluation and Management services and services reviewed since CY 2010. CPT codes 73718 and 73720 were identified as part of this screen.

73718 Magnetic resonance (eg, proton) imaging, lower extremity other than joint; without contrast material(s)
The RUC reviewed the survey results from 58 radiologists and recommends the 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 reviewed the survey 25th percentile work RVU of 1.35 and agreed that the current value of 1.35 is appropriate for this service. To validate a work RVU of 1.35, the RUC compared the survey code to 2nd key reference code 70551 Magnetic resonance (eg, proton) imaging, brain (including brain stem); without contrast material (work RVU of 1.48, intra-service time of 18, total time of 28) and noted that with the surveyed code having slightly less time and comparable intensity of work, it would be appropriate to value the service somewhat less than the reference code. To further support a work RVU of 1.35, the RUC compared the survey code to CPT code 78454 Myocardial perfusion imaging, planar (including qualitative or quantitative wall motion, ejection fraction by first pass or gated technique, additional quantification, when performed); multiple studies, at rest and/or stress (exercise or pharmacologic) and/or redistribution and/or rest reinjection (work RVU of 1.34, intra-service time of 15 minutes, total time of 25 minutes) and noted that both services have identical intra-service times and involve similar amount of physician work. The RUC recommends a work RVU of 1.35 for CPT code 73718.

73719 Magnetic resonance (eg, proton) imaging, lower extremity other than joint; with contrast material(s)
The RUC reviewed the survey results from 58 radiologists and recommends the following physician time components: pre-service time of 5 minutes, intra-service time of 20 minutes and post-service time of 5 minutes.

The RUC reviewed the survey 25th percentile work RVU of 1.62 and agreed that the current value of 1.62 is appropriate for this service. To validate a work RVU of 1.62, the RUC compared the survey code to top key reference code 73722 Magnetic resonance (eg, proton) imaging, any joint of lower extremity; with contrast material(s) (work RVU of 1.62, intra-service time of 20 minutes, total time of 38.5 minutes) and noted that while the reference code has more total time, both services have identical intra-service time and the survey respondents indicated that the survey code is somewhat more intense to perform, justifying similar valuation. To further justify a value of 1.62, the RUC compared the survey code to CPT code 74176 Computed tomography, abdomen and pelvis; without contrast material (work RVU of 1.74, intra-service time of 22 minutes and total time of 32 minutes) and noted that both services have a similar intensity of physician work, whereas the survey code has slightly less intra-service and total time,
justifying a lower relative valuation for the survey code. **The RUC recommends a work RVU of 1.62 for CPT code 73719.**

73720 Magnetic resonance (eg, proton) imaging, lower extremity other than joint; without contrast material(s), followed by contrast material(s) and further sequences

The RUC reviewed the survey results from 58 radiologists and recommends the following physician time components: pre-service time of 5 minutes, intra-service time of 24 minutes and post-service time of 5 minutes.

The RUC reviewed the survey 25th percentile work RVU of 2.15 and agreed that the current value of 2.15 is appropriate for this service. To justify a work RVU of 2.15, the RUC compared the survey code to 2nd key reference and MPC 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 of 2.29, intra-service time of 25 minutes and total time of 35 minutes) and noted that with similar physician times and intensity of physician work, these services should be valued similarly. To further support a value of 2.15, the RUC compared the survey code to 72156 Magnetic resonance (eg, proton) imaging, spinal canal and contents, without contrast material, followed by contrast material(s) and further sequences; cervical (work RVU of 2.29, intra-service time of 25 minutes and total time of 35 minutes) and noted that with similar physician times and intensity of physician work, these services should also be valued similarly. **The RUC recommends a work RVU of 2.15 for CPT code 73720.**

**Practice Expense**

The Practice Expense Subcommittee reviewed the direct PE inputs as recommended by the specialty societies and made several modifications to the supplies and reduced the MRI tech’s time for quality control of the images in the PACS to 3 minutes. The Subcommittee did have significant discussions around how long the pre-service education and obtain consent should take. Typically MR codes have received 7 minutes in the non-contrast codes and 9 minutes for each contrast code. The Subcommittee discussed that with the profusion of this technology over many years many patients have received multiple scans prior and are familiar with the question and answer process. Furthermore, while it is true that the safety check list must be read through each visit, the list is still standardized and efficiencies have been made in the process. The Subcommittee agreed that the appropriate time should be 5 minutes for non-contrast (73718) and 7 minutes for contrast (73719 and 73720). This issue will be looked at in the future so that a uniform time allocation for pre-service education and obtain consent for MR codes across the family can be established.

**MRI of Abdomen and Pelvis (Tab 21)**

Kurt Schoppe, MD, Daniel Wessell, MD, Jonathan Flug, MD (ACR)

In the Final Rule for 2016, CMS re-ran the high expenditure services across specialties with Medicare allowed charges of $10 million or more. CMS identified the top 20 codes by specialty in terms of allowed charges, excluding 010 and 090-day global services, anesthesia and Evaluation and Management services and services reviewed since CY 2010. CPT codes 74182 and 72196 were identified as part of this screen.
74181 Magnetic resonance (eg, proton) imaging, abdomen; without contrast material(s)
The RUC reviewed the survey results from 50 radiologists and recommends the following physician time components: pre-service time of 5 minutes, intra-service time of 20 minutes and post-service time of 5 minutes.

The RUC reviewed the survey respondents’ estimated physician work and agreed with the specialty that maintaining the current work RVU of 1.46 is supported. To justify a work RVU of 1.46, the RUC compared the survey code to top key reference code 70551 Magnetic resonance (eg, proton) imaging, brain (including brain stem); without contrast material (work RVU of 1.48, intra-service time of 18 minutes, total time of 28 minutes) and noted that with the survey code having more intra-service and total time and the survey respondents indicating that both services have similar work intensities, a value of 1.46 is supported for the survey code. The RUC also compared the survey code to CPT code 72141 Magnetic resonance (eg, proton) imaging, spinal canal and contents, cervical; without contrast material(work RVU of 1.48, intra-service time of 20 minutes, total time of 30 minutes) and noted that both services have identical times and involve a similar amount of physician work. The RUC recommends a work RVU of 1.46 for CPT code 74181.

74182 Magnetic resonance (eg, proton) imaging, abdomen; with contrast material(s)
The RUC reviewed the survey results from 50 radiologists and recommends the following physician time components: pre-service time of 5 minutes, intra-service time of 25 minutes and post-service time of 5 minutes.

The RUC reviewed the survey respondents’ estimated physician work and agreed with the specialty that maintaining the current work RVU of 1.73 is supported. To justify a work RVU of 1.73, the RUC compared the survey code to top key reference code 74177 Computed tomography, abdomen and pelvis; with contrast material(s) (work RVU of 1.82, intra-service time of 25 minutes, total time of 35 minutes) and noted that both services have identical times and 57 percent of survey respondents indicated the survey code is a somewhat more intense and complex service relative to 74177. To further support a work RVU of 1.73, the RUC compared the survey code to 2nd key reference code 74176 Computed tomography, abdomen and pelvis; without contrast material (work RVU of 1.74, intra-service time of 22 minutes, total time of 32 minutes) and observed that the survey code has somewhat more intra-service and total time. The RUC recommends a work RVU of 1.73 for CPT code 74182.

74183 Magnetic resonance (eg, proton) imaging, abdomen; without contrast material(s), followed by with contrast material(s) and further sequences
The RUC reviewed the survey results from 50 radiologists and recommends the following physician time components: pre-service time of 5 minutes, intra-service time of 30 minutes and post-service time of 5 minutes.

The RUC reviewed the survey 25th percentile work RVU of 2.20 and agreed that this value, which is somewhat lower than current, correctly captures the amount of physician work involved in performing this service. To justify a work RVU of 2.20, the RUC compared the survey code to MPC 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 of 2.29, intra-service time of 25 minutes, total time of 35 minutes) and noted that the survey code involves both 5 minutes more of intra-
service time and total time. The RUC also compared the survey code to 74174 *Computed tomographic angiography, abdomen and pelvis, with contrast material(s), including noncontrast images, if performed, and image postprocessing* (work RVU of 2.20 and noted that both services have identical times and involve a similar amount of physician work. **The RUC recommends a work RVU of 2.20 for CPT code 74183.**

72195 *Magnetic resonance (eg, proton) imaging, pelvis; without contrast material(s)*

The RUC reviewed the survey results from 50 radiologists and recommends the following physician time components: pre-service time of 5 minutes, intra-service time of 20 minutes and post-service time of 5 minutes.

The RUC reviewed the survey respondents estimated physician work and agreed with the specialty that maintaining the current work RVU of 1.46 is supported. To justify a work RVU of 1.46, the RUC compared the survey code to top key reference code 70551 *Magnetic resonance (eg, proton) imaging, brain (including brain stem); without contrast material* (work RVU of 1.48, intra-service time of 18 minutes, total time of 28 minutes) and noted that with the survey code having more intra-service and total time and the survey respondents indicating that both services have similar work intensities, a value of 1.46 is supported for the survey code. The RUC also compared the survey code to CPT code 72141 *Magnetic resonance (eg, proton) imaging, spinal canal and contents, cervical; without contrast material* (work RVU of 1.48, intra-service time of 20 minutes, total time of 30 minutes) and noted that both services have identical times and involve a similar amount of physician work. **The RUC recommends a work RVU of 1.46 for CPT code 72195.**

72196 *Magnetic resonance (eg, proton) imaging, pelvis; with contrast material(s)*

The RUC reviewed the survey results from 50 radiologists and recommends the following physician time components: pre-service time of 5 minutes, intra-service time of 25 minutes and post-service time of 5 minutes.

The RUC reviewed the survey respondents estimated physician work and agreed with the specialty that maintaining the current work RVU of 1.73 is supported. To justify a work RVU of 1.73, the RUC compared the survey code to top key reference code 74177 *Computed tomography, abdomen and pelvis; with contrast material(s)* (work RVU of 1.82, intra-service time of 25 minutes, total time of 35 minutes) and noted that both services have identical times and 57 percent of survey respondents indicated the survey code is a somewhat more intense and complex service relative to 74177. To further support a work RVU of 1.73, the RUC compared the survey code to 2nd key reference code 74176 *Computed tomography, abdomen and pelvis; without contrast material* (work RVU of 1.74, intra-service time of 22 minutes, total time of 32 minutes) and observed that the survey code has somewhat more intra-service and total time. **The RUC recommends a work RVU of 1.73 for CPT code 72196.**

72197 *Magnetic resonance (eg, proton) imaging, pelvis; without contrast material(s), followed by contrast material(s) and further sequences*

The RUC reviewed the survey results from 50 radiologists and recommends the following physician time components: pre-service time of 5 minutes, intra-service time of 27 minutes and post-service time of 5 minutes.

The RUC reviewed the survey 25th percentile work RVU of 2.20 and agreed that this value, which is somewhat lower than current, correctly captures the amount of physician
work involved in performing this service. To justify a work RVU of 2.20, the RUC compared the surveyed code to MPC 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 of 2.29, intra-service time of 25 minutes, total time of 35 minutes) and noted that the survey code involves somewhat more intra-service and total time. The RUC also compared the survey code to 74174 *Computed tomographic angiography, abdomen and pelvis, with contrast material(s), including noncontrast images, if performed, and image postprocessing* (work RVU of 2.20 and noted that both services have similar times and involve a similar amount of physician work. **The RUC recommends a work RVU of 2.20 for CPT code 72197.**

**Practice Expense**

The Practice Expense Subcommittee reviewed the direct PE inputs as recommended by the specialty societies and made several modifications to the supplies and reduced the MRI tech’s time for quality control of the images in the PACS to 3 minutes. The Subcommittee did have significant discussions around how long the pre-service education and obtain consent should take. Typically MR codes have received 7 minutes in the non-contrast codes and 9 minutes for each contrast code. The Subcommittee discussed that with the profusion of this technology over many years many patients have received multiple scans prior and are familiar with the question and answer process. Furthermore, while it is true that the safety check list must be read through each visit, the list is still standardized and efficiencies have been made in the process. The Subcommittee agreed that the appropriate time should be 5 minutes for non-contrast (74181 and 72195) and 7 minutes for contrast (74182, 74183, 72196 and 72197). This issue will be looked at in the future so that a uniform time allocation for pre-service education and obtain consent for MR codes across the family can be established.

**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.

**Angiography of Extremities (Tab 22)**

Matthew Sideman, MD, (SVS); Robert Zwolak, MD, Francesco Aiello, MD, Micheal Hall, MD, (SIR); Jerry Niedzwiecki, MD, Curtis Anderson, MD, Kurt Schoppe, MD, (ACR); Richard Wright, MD (ACC); and Clifford Kavinsky, MD (SCAI)

In the Final Rule for 2016, CMS re-ran the high expenditure services across specialties with Medicare allowed charges of $10 million or more. CMS identified the top 20 codes by specialty in terms of allowed charges, excluding 010 and 090-day global services, anesthesia and Evaluation and Management services and services reviewed since CY 2010. CPT code 75710 was identified as part of this screen.

**Compelling Evidence**

The specialty societies presented several points of compelling evidence to support that CPT codes 75710 and 75716 are potentially misvalued. CPT codes 75710 and 75716 have never been surveyed and are the result of CMS/other inputs, which is considered by the RUC as a flawed methodology since it can not be substantiated. There has also been a change in the dominant specialty over time. When values were first assigned in 1992, radiology was the dominant provider; however, vascular surgery is now the dominant provider of the professional component of CPT code 75710. Furthermore, there has been
a change in physician work for CPT codes 75710 and 75716 due to changes in technique, technology and patient population. In 1992, the typical patient for an extremity angiogram was a patient suspected of having peripheral arterial disease. Imaging focused mainly on the aorta, iliac and femoral vessels with less attention to the distal runoff. Today, the patient population has changed. The evaluation of inflow is no longer performed with an invasive procedure but is imaged with CT Angiography or MR Angiography as the accuracy of these modalities has improved significantly over the past two decades. The improvement in technology also allows for more detailed imaging of the distal runoff and pedal vasculature for diagnostic angiography. The transition from analog to digital imaging has not only improved the visualization but has increased the number of images to be reviewed and interpreted for CPT codes 75710 and 75716. Thus, the changes in patient population, technique and technology have resulted in a change in the complexity of physician work and total time since 1992 and constitute compelling evidence for a change in value. The RUC agreed that there is compelling evidence that these services are potentially misvalued based on flawed methodology, change in the dominant provider, change in technique, change in technology and a change in the patient population.

75710 Angiography, extremity, unilateral, radiological supervision and interpretation
The RUC reviewed the survey results from 124 physicians and recommends the following physician time components: pre-service time of 15 minutes, intra-service time of 40 minutes and post-service time of 15 minutes.

The RUC reviewed the survey 25th percentile work RVU of 1.75 and agreed that this value is appropriate for this service. To justify a work RVU of 1.75, the RUC compared the survey code to MPC code 95861 Needle electromyography; 2 extremities with or without related paraspinal areas (work RVU = 1.54 and 29 minutes intra-service time) and noted that the survey code has somewhat more intra-service time and total time. To further support a work RVU of 1.75, the RUC compared the survey code to top key reference code 75791 Angiography, arteriovenous shunt (eg, dialysis patient fistula/graft), complete evaluation of dialysis access, including fluoroscopy, image documentation and report (includes injections of contrast and all necessary imaging from the arterial anastomosis and adjacent artery through entire venous outflow including the inferior or superior vena cava), radiological supervision and interpretation (work RVU of 1.71, intra-service time of 25 minutes, total time of 55 minutes) and noted that the survey code involves much more intra-service and total time, and 89% of the survey respondents indicated that the surveyed code is an overall more intense and complex service to perform. The RUC recommends a work RVU of 1.75 for CPT code 75710.

75716 Angiography, extremity, bilateral, radiological supervision and interpretation
The RUC reviewed the survey results from 124 physicians and recommends the following physician time components: pre-service time of 15 minutes, intra-service time of 50 minutes and post-service time of 15 minutes.

The RUC reviewed the survey 25th percentile work RVU of 1.97 and agreed that this value is appropriate for this service. To justify a work RVU of 1.97, the RUC compared the survey code to CPT code 90834 Psychotherapy, 45 minutes with patient and/or family member (work RVU of 2.00, intra-service time of 45 minutes, total time of 60 minutes) and noted that the survey code involves more intra-service and total time. To further support a work RVU of 1.97, the RUC compared the survey code to MPC 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 of 2.01, intra-service time of 30 minutes, total time of 40 minutes) and noted that the survey code requires much more time to perform, though is less intense to perform, supporting similar valuation between the two services. The RUC recommends a work RVU of 1.97 for CPT code 75716.

Practice Expense
The Practice Expense Subcommittee reviewed the recommended direct PE inputs and noted that nephrology is the primary specialty in the non-facility setting. The nephrologist representatives indicated that they weren’t part of the work survey and weren’t sure about the new process in which the dominant providers of a service in the non-facility setting will be required to participate in the development of practice expense recommendations. However, it was articulated that the utilization for these two codes will be dropping significantly due to the bundling in the Dialysis Circuit series of codes that CPT approved, and the RUC valued, for CPT 2017. After this occurs, it is unlikely that nephrology will remain the dominant specialty.

The Subcommittee also made several minor modifications to the clinical staff, including: reducing the confirmation of prior images and review of patient clinical information to 2 minutes, respectively and removing any minutes relating to preparing and positioning the patient. The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.

Flag for Review of Specialty Mix
With the newly bundled dialysis access maintenance codes that were approved in January 2016 as part of Dialysis Circuit code family 36901-36909, the specialties project that a significant portion of the nephrology volume for 75710 will instead be reported with applicable Dialysis Circuit codes. Currently, nephrology represented 17.8 percent of the 2015 Medicare claims for 75710. The RUC will add a flag for review to confirm that nephrology utilization volume has decreased once 2017 Medicare utilization data is available for review.

Ophthalmic Ultrasound (Tab 23)
David Glasser, MD (AAO); John Thompson, MD (ASRS)

In the Final Rule for 2016 CMS re-ran the high expenditure services across specialties with Medicare allowed charges of $10 million or more. CMS identified the top 20 codes by specialty in terms of allowed charges, excluding 010 and 090-day global services, anesthesia and Evaluation and Management (E/M) services and services reviewed since CY 2010. CPT code 76512 was identified via this screen and codes 76510 and 76511 were added for review as part of this family of services.

The specialty societies indicated a scheduling conflict for the American Society of Retina Specialists (ASRS) to be able to survey for the April 2016 RUC meeting. The RUC inquired about the delay and learned that ASRS had a meeting conflict which would have prohibited their involvement in the survey process. The RUC agreed that it was important for the appropriate specialties to be involved and that the delay would not impact the ability of the RUC to value the codes within the current cycle. Therefore, the RUC agreed that these services be surveyed for the October 2016 RUC meeting.
76510 Ophthalmic ultrasound, diagnostic; B-scan and quantitative A-scan performed during the same patient encounter
The RUC reviewed the survey data from 66 ophthalmologists and optometrists for CPT coded 76510 and determined that a work RVU of 0.70, which is between the median and 25th% of the survey results, appropriately accounts for the work required to perform this service. The RUC recommends the following physician time: pre-service time of 3 minutes, intra-service time of 15 minutes, and immediate post-service time of 2 minutes. The RUC noted that the specialty society appropriately decreased in the pre-service and immediate post-service time since this service is typically performed with an Evaluation and Management (E/M) visit. The RUC noted that the median work RVU was too high given the decrease in intra-service time. The RUC recommends directly crosswalking CPT code 76510 to 93970 Duplex scan of extremity veins including responses to compression and other maneuvers; complete bilateral study (work RVU=0.70, intra-service time of 15 minutes) as both services require the same physician work and intra-service time of 15 minutes.

The RUC compared the surveyed service to reference service 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 and 10 minutes intra-service time) and agreed that the surveyed service is more intense and complex on all measures examined, requires more physician work and time, thus is appropriately valued higher. The RUC also compared this service to 76770 Ultrasound, retroperitoneal (eg, renal, aorta, nodes), real time with image documentation; complete (work RVU=0.74, intra-service time of 11 minutes) and 99231 Subsequent hospital care, per day, for the evaluation and management of a patient, (work RVU = 0.76, intra-service time of 10 minutes) and determined that these services are similar and support the recommended value for 76510. The RUC recommends a work RVU of 0.70 for CPT code 76510.

76511 Ophthalmic ultrasound, diagnostic; quantitative A-scan only
The RUC reviewed the survey data from 36 ophthalmology physicians and optometric providers and determined that the survey 25th percentile work RVU of 0.64 appropriately accounts for the work required to perform this service. RUC discussed that the median survey response was too high given the 5 minute decrease in intra-service time. The RUC recommends the following physician time: pre-service time of 3 minutes, intra-service time of 10 minutes, and immediate post-service time of 2 minutes. The RUC noted that the specialty society appropriately decreased in the pre-service and immediate post-service time since this service is typically performed with an Evaluation and Management (E/M) visit.

To validate a work RVU of 0.64, the RUC compared the survey code to top key reference code 92002 Ophthalmological services: medical examination and evaluation with initiation of diagnostic and treatment program; intermediate, new patient (work RVU = 0.88 and 15 minutes intra-service time) and noted that the survey code has lower intra-service time, and the survey respondents indicated that the survey code is somewhat more to much more intense to perform, further justifying this valuation. The RUC compared the surveyed service to reference service 92100 Serial tonometry (separate procedure) with multiple measurements of intraocular pressure over an extended time period with interpretation and report, same day (eg, diurnal curve or medical treatment of acute...
and agreed that the surveyed service is more intense as indicated by 84% of the survey respondents and this appropriately valued slightly higher. The RUC also compared the surveyed code to MPC code 76815 Ultrasound, pregnant uterus, real time with image documentation, limited (eg, fetal heart beat, placental location, fetal position and/or qualitative amniotic fluid volume), 1 or more fetuses (work RVU=0.65, intra-service time of 5.5 minutes) and similar service 76856 Ultrasound, pelvic (nonobstetric), real time with image documentation; complete (work RVU=0.69, intra-service time of 10 minutes).

The RUC recommends a work RVU of 0.64 for CPT code 76511.

76512 Ophthalmic ultrasound, diagnostic; B-scan (with or without superimposed non-quantitative A-scan)

The RUC reviewed the survey data from 94 ophthalmology physicians and optometric providers and determined that the survey 25th percentile work RVU of 0.56 appropriately accounts for the work required to perform this service. RUC discussed that the median survey value was too high given the 5 minute decrease in intra-service time. The RUC recommends the following physician time: pre-service time of 3 minutes, intra-service time of 11 minutes, and immediate post-service time of 2 minutes. The RUC noted that the specialty society appropriately decreased in the pre-service and immediate post-service time since this service is typically performed with an Evaluation and Management (E/M) visit. The

RUC compared the surveyed service to MPC codes 76815 Ultrasound, pregnant uterus, real time with image documentation, limited (eg, fetal heart beat, placental location, fetal position and/or qualitative amniotic fluid volume), 1 or more fetuses (work RVU=0.65, intra-service time of 5.5 minutes) and 88112 Cytopathology, selective cellular enhancement technique with interpretation (eg, liquid based slide preparation method), except cervical or vaginal (work RVU = 0.56 and 15 minutes intra-service time) and determined that these services all require similar physician work and support the recommended value. For additional support, the RUC referenced similar service 76856 Ultrasound, pelvic (nonobstetric), real time with image documentation; complete (work RVU=0.69, intra-service time of 10 minutes). The RUC recommends a work RVU of 0.56 for CPT code 76512.

Practice Expense:
The RUC reviewed and accepted the direct PE 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.

MRI Breast (Tab 24)
Kurt A. Schoppe, MD (ACR)

In the Final Rule for 2016, CMS re-ran the high expenditure services across specialties with Medicare allowed charges of $10 million or more. CMS identified the top 20 codes by specialty in terms of allowed charges, excluding 010 and 090-day global services, anesthesia and Evaluation and Management services and services reviewed since CY 2010. The specialty societies indicated they will survey these services for the October 2016 RUC meeting.
In preparation to survey CPT codes 77058 and 77059, the specialty societies noted that these codes do not parallel the structure of other breast imaging families. For instance, the unilateral and bilateral coding language is not in alignment. Also, both procedures should include computer-aided detection (CAD). The Code Change Application (CCA) will be submitted for the upcoming February 2017 CPT Editorial Panel meeting. The RUC recommends CPT codes 77058 and 77059 be referred to the CPT Editorial Panel.

**Cardiac Electrophysiology Device Monitoring Services (Tab 25)**
Richard Wright, MD (ACC); Mark Schoenfeld, MD, Thad Waites, MD, David Slotwiner, MD (HRS)

In the Final Rule for 2016 CMS re-ran the high expenditure services across specialties with Medicare allowed charges of $10 million or more. CMS identified the top 20 codes by specialty in terms of allowed charges, excluding 010 and 090-day global services, anesthesia and Evaluation and Management services and services reviewed since CY 2010. CPT codes 93280, 93288, 93293, 93294, 93295, and 93296 were identified and the specialty societies indicated they will survey the entire family services for the October 2016 RUC meeting.

To survey this large family of services, the specialty societies obtained the RUC’s approval to complete traditional surveys for the three benchmark codes 93280, 93283 and 93288. These services were selected because they are commonly performed and well understood, encompassing the two main devices, pacemakers and implantable cardioverter defibrillators (ICDs). Respondents then surveyed the remaining services for physician time and work RVU.

**Pacemaker Services**

93279 Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; single lead pacemaker system

The RUC reviewed the survey results from 78 cardiologists and determined that the current value 0.65, below the survey 25th percentile work RVU of 0.70, appropriately accounts for the work required to perform this service. The RUC recommends 5 minutes pre-service time, 10 minutes intra-service time and 7 minutes immediate post-service time. The specialty societies indicated the current value 0.77, similar to the survey 25th percentile work RVU of 0.75, appropriately accounts for the work required to perform this service. For additional support the RUC referenced MPC code 76830 Ultrasound, transvaginal (work RVU = 0.69 and 10 minutes intra-service time) and similar service 95937 Neuromuscular junction testing (repetitive stimulation, paired stimuli), each nerve, any 1 method (work RVU = 0.65 and 12 minutes intra-service time). The RUC recommends a work RVU of 0.65 for CPT code 93279.

93280 Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead pacemaker system

The RUC reviewed the survey results from 78 cardiologists and determined that the current value 0.77, similar to the survey 25th percentile work RVU of 0.75, appropriately
accounts for the work required to perform this service. The RUC recommends 7 minutes pre-service time, 15 minutes intra-service time and 10 minutes immediate post-service time. The specialty societies indicated and the RUC agreed that the physician work has not changed since this service was last reviewed. The RUC compared 93280 to the top to key reference services 93750 Interrogation of ventricular assist device (VAD), in person, with physician or other qualified health care professional analysis of device parameters (eg, drivelines, alarms, power surges), review of device function (eg, flow and volume status, septum status, recovery), with programming, if performed, and report (work RVU = 0.92 and 30 minutes of intra-service time) and 99213 Office or other outpatient visit for the evaluation and management of an established patient (work RVU = 0.97 and 15 minutes of intra-service time) and determined that this service requires slightly less physician work to complete. For additional support the RUC referenced MPC codes 93015 Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; with supervision, interpretation and report (work RVU = 0.75 and 20 minutes intra-service time) and 76816 Ultrasound, pregnant uterus, real time with image documentation, follow-up (eg, re-evaluation of fetal size by measuring standard growth parameters and amniotic fluid volume, re-evaluation of organ system(s) suspected or confirmed to be abnormal on a previous scan), transabdominal approach, per fetus (work RVU = 0.85 and 15 minutes intra-service time). The RUC recommends a work RVU of 0.77 for CPT code 93279.

93281 Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead pacemaker system
The RUC reviewed the survey results from 78 cardiologists and determined that a crosswalk to a work RVU of 0.85 appropriately accounts for the work required to perform this service. The RUC noted that the intra-service time had decreased by 5 minutes, therefore the current value of 0.90 and survey 25th percentile work RVU of 0.89 were slightly high given the decrease in time. The RUC recommends 7 minutes pre-service time, 15 minutes intra-service time and 10 minutes immediate post-service time. The RUC recommended to crosswalk the work RVU to MPC code 76816 Ultrasound, pregnant uterus, real time with image documentation, follow-up (eg, re-evaluation of fetal size by measuring standard growth parameters and amniotic fluid volume, re-evaluation of organ system(s) suspected or confirmed to be abnormal on a previous scan), transabdominal approach, per fetus (work RVU = 0.85 and 15 minutes intra-service time). The RUC recommends a work RVU of 0.85 for CPT code 93281.

93288 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead pacemaker system
The RUC reviewed the survey results from 78 cardiologists and determined that the current value 0.43, below the survey 25th percentile work RVU of 0.60 appropriately accounts for the work required to perform this service. The RUC recommends 5 minutes pre-service time, 10 minutes intra-service time and 7 minutes immediate post-service time. The specialty societies indicated and the RUC agreed that the physician work and time has not changed since this service was last reviewed. The RUC noted that 93288 is parallel to the other interrogation codes 93290 and 93292, which all require the same physician work and 10 minutes of intra-service time. For additional support the RUC
referenced MPC code 29540 *Strapping; ankle and/or foot* (work RVU = 0.39 and 9 minutes intra-service time) and similar service 75902 *Mechanical removal of intraluminal (intracatheter) obstructive material from central venous device through device lumen, radiologic supervision and interpretation* (work RVU = 0.39 and 10 minutes intra-service time). The RUC recommends a work RVU of 0.43 for CPT code 93288.

**Implantable Cardioverter Defibrillator (ICD) Services**

**93282** Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; single lead transvenous implantable defibrillator system

The RUC reviewed the survey results from 78 cardiologists and determined that the current value 0.85, which is the survey 25th percentile work as well, appropriately accounts for the work required to perform this service. The RUC recommends 6 minutes pre-service time, 12 minutes intra-service time and 10 minutes immediate post-service time. For additional support the RUC referenced MPC code 76700 *Ultrasound, abdominal, real time with image documentation; complete* (work RVU = 0.81 and 11 minutes intra-service time) which appropriately requires slightly less physician work and time. The RUC recommends a work RVU of 0.85 for CPT code 93282.

**93283** Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; dual lead transvenous implantable defibrillator system

The RUC reviewed the survey results from 78 cardiologists and determined that the current work value 1.15, in between the survey 25th percentile work RVU of 0.91 and survey median work RVU of 1.25, appropriately accounts for the work required to perform this service. The RUC recommends 10 minutes pre-service time, 15 minutes intra-service time and 10 minutes immediate post-service time. The RUC compared 93283 to the top to key reference services 93750 *Interrogation of ventricular assist device (VAD), in person, with physician or other qualified health care professional analysis of device parameters (eg, drivelines, alarms, power surges), review of device function (eg, flow and volume status, septum status, recovery), with programming, if performed, and report* (work RVU = 0.92 and 30 minutes of intra-service time) and 99238 *Hospital discharge day management; 30 minutes or less* (work RVU = 1.28 and 20 minutes of intra-service time) and determined that this service requires slightly less physician work to complete. For additional support the RUC referenced MPC codes 70460 *Computed tomography, head or brain; with contrast material(s)* (work RVU = 1.13 and 12 minutes intra-service time) and 95819 *Electroencephalogram (EEG); including recording awake and asleep* (work RVU = 1.08 and 15 minutes intra-service time). The RUC recommends a work RVU of 1.15 for CPT code 93283.

**93284** Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; multiple lead transvenous implantable defibrillator system
The RUC reviewed the survey results from 78 cardiologists and determined that the current work value 1.25, which is between the survey 25th percentile work of 0.95 and survey median of 1.40, appropriately accounts for the work required to perform this service. The RUC recommends 9 minutes pre-service time, 18 minutes intra-service time and 10 minutes immediate post-service time. For additional support the RUC referenced MPC code 99238 Hospital discharge day management; 30 minutes or less (work RVU = 1.28 and 20 minutes of intra-service time), which appropriately requires similar physician work and time. **The RUC recommends a work RVU of 1.25 for CPT code 93284.**

93289 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; single, dual, or multiple lead transvenous implantable defibrillator system, including analysis of heart rhythm derived data elements

The RUC reviewed the survey results from 78 cardiologists and determined that the survey 25th percentile work RVU of 0.75 appropriately accounts for the work required to perform this service. The intra-service time had decreased by 5 minutes from the last time it was surveyed therefore, the RUC determined that decreasing the work RVU from the current 0.92 to the 25th percentile appropriately addresses the decrease in time, while maintaining rank order among these service. The RUC recommends 5 minutes pre-service time, 10 minutes intra-service time and 9 minutes immediate post-service time. For additional support the RUC referenced MPC code 76817 Ultrasound, pregnant uterus, real time with image documentation, transvaginal (work RVU = 0.75 and 10 minutes intra-service time) which appropriately requires the same physician work. **The RUC recommends a work RVU of 0.75 for CPT code 93289.**

**Peri-Procedural Services**

93286 Peri-procedural device evaluation (in person) and programming of device system parameters before or after a surgery, procedure, or test with analysis, review and report by a physician or other qualified health care professional; single, dual, or multiple lead pacemaker system

The RUC reviewed the survey results from 78 cardiologists and determined that the current work value 0.30, which is below the survey 25th percentile work of 0.60, appropriately accounts for the work required to perform this service. The RUC recommends 5 minutes pre-service time, 10 minutes intra-service time and 7 minutes immediate post-service time, which is the same total time as it is currently. The RUC noted that 93286 is similar to 93279 (recommended work RVU =0.65) and is valued approximately half the physician work of 93279 because 93286 will be reported peri-procedurally, once before the procedure and once after the procedure. Additionally, code 93286 and 93279 are comparable because both involve interrogation and programming of a pacemaker device. The RUC determined a lesser relative value for 93286 is appropriate because this service involves only interrogating certain parameters and programming certain parameters. For additional support the RUC referenced comparable code 94726 Plethysmography for determination of lung volumes and, when performed, airway resistance (work RVU = 0.26 and 5 minutes of intra-service time) which requires less physician work and time. **The RUC recommends a work RVU of 0.30 for CPT code 93286.**
93287 Peri-procedural device evaluation (in person) and programming of device system parameters before or after a surgery, procedure, or test with analysis, review and report by a physician or other qualified health care professional; single, dual, or multiple lead implantable defibrillator system

The RUC reviewed the survey results from 78 cardiologists and determined that the current work value 0.45, which is below the survey 25\textsuperscript{th} percentile work of 0.70, appropriately accounts for the work required to perform this service. The RUC recommends 5 minutes pre-service time, 10 minutes intra-service time and 10 minutes immediate post-service time. The RUC determined that while this service is similar to 93282 (recommended work RVU= 0.85), due to both involving interrogation and programming of a defibrillator device, the surveyed code should be valued approximately half the work because 93287 will be reported peri-procedurally, once before the procedure and once after the procedure. For additional support the RUC referenced comparable code 77002 *Fluoroscopic guidance for needle placement (eg, biopsy, aspiration, injection, localization device)* (work RVU = 0.54 and 15 minutes of intra-service time) which requires more physician work and time. **The RUC recommends a work RVU of 0.45 for CPT code 93287.**

Other Cardiac Device Services

93285 Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care professional; implantable loop recorder system

The RUC reviewed the survey results from 78 cardiologists and determined that the current work value 0.52, which is below the survey 25\textsuperscript{th} percentile work of 0.60, appropriately accounts for the work required to perform this service. The RUC recommends 5 minutes pre-service time, 10 minutes intra-service time and 5 minutes immediate post-service time. The RUC questioned why 93285 is more intense than 93292 (recommended work RVU = 0.43), as they have the same physician time. The specialty society indicated that the loop recorder, 93285, has multiple parameters to program to make sure it is sensing and detecting appropriately. There are many different ways to program depending on what type of rhythm the physician is looking for, bradyarrhythmia, tachyarrhythmia or irregular arrhythmia and sensing needs to be adjusted based on where it is placed and the movement of the patient. Given this explanation and supported by the IWPUT of 0.030, the RUC determined 93285 is more intense than 93292. For additional support the RUC referenced comparable codes 93926 *Duplex scan of lower extremity arteries or arterial bypass grafts; unilateral or limited study* (work RVU = 0.50 and 10 minutes of intra-service time) and 76820 *Doppler velocimetry, fetal; umbilical artery* (work RVU = 0.50 and 10 minutes intra-service time) which require similar physician work and time. **The RUC recommends a work RVU of 0.52 for CPT code 93285.**

93290 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; implantable cardiovascular monitor system, including analysis of 1 or more recorded physiologic cardiovascular data elements from all internal and external sensors

The RUC reviewed the survey results from 78 cardiologists and determined that the current work value 0.43, which is below the survey 25\textsuperscript{th} percentile work of 0.58, appropriately accounts for the work required to perform this service. The RUC
recommends 5 minutes pre-service time, 10 minutes intra-service time and 8 minutes immediate post-service time. The RUC noted that 93290 is parallel to the pacemaker interrogation code 93288 and wearable defibrillator interrogation code 93292, all require the same physician work and 10 minutes of intra-service time. For additional support the RUC referenced comparable code 29540 Strapping; ankle and/or foot (work RVU = 0.39 and 9 minutes intra-service time) which requires similar physician work and time. The RUC recommends a work RVU of 0.43 for CPT code 93290.

93291 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; implantable loop recorder system, including heart rhythm derived data analysis

The RUC reviewed the survey results from 78 cardiologists and determined that the a crosswalk to 0.37 work RVUs is appropriate due to the 5 minute decrease in intra-service time. The RUC recommends 5 minutes pre-service time, 7 minutes intra-service time and 5 minutes immediate post-service time. The RUC crosswalked 93291 to 96446 Chemotherapy administration into the peritoneal cavity via indwelling port or catheter (work RVU = 0.37 and 7 minutes intra-service time). For additional support the RUC referenced comparable code 92228 Remote imaging for monitoring and management of active retinal disease (eg, diabetic retinopathy) with physician review, interpretation and report, unilateral or bilateral (work RVU = 0.37 and 8 minutes intra-service time) which requires similar physician work and time. The RUC recommends a work RVU of 0.37 for CPT code 93291.

93292 Interrogation device evaluation (in person) with analysis, review and report by a physician or other qualified health care professional, includes connection, recording and disconnection per patient encounter; wearable defibrillator system

The RUC reviewed the survey results from 78 cardiologists and determined that the current work value 0.43, which is below the survey 25th percentile work of 0.60, appropriately accounts for the work required to perform this service. The RUC recommends 5 minutes pre-service time, 10 minutes intra-service time and 5 minutes immediate post-service time. The RUC noted that 93292 is parallel to the other interrogation codes 93288 and 93290, all require the same physician work and 10 minutes of intra-service time. For additional support the RUC referenced comparable code 29540 Strapping; ankle and/or foot (work RVU = 0.39 and 9 minutes intra-service time) which requires similar physician work and time. The RUC recommends a work RVU of 0.43 for CPT code 93292.

Remote Monitoring Services (93293, 93294, 9329, 93297 & 93298)

The specialty societies indicated and the RUC agreed that the survey respondents may have based their responses on a single transmission and not all transmissions for the 30-90 days as described. The specialty society will resurvey the remote monitoring codes 93293, 93294, 9329, 93297 and 93298 with specific instructions vetted via the Research Subcommittee directing survey respondents to account for the work and time required for all transmissions provided. These services will be resurveyed in January 2017 and will be included in the same cycle, CPT 2018.

Practice Expense

The Practice Expense Subcommittee reviewed the direct practice expense inputs and made the following modifications:
1) Reduced vital signs from 5 to 3 minutes;
2) Reduced the assist in helping the physician in performing the procedure to line 35 to reflect the physician intra-service time was at least the clinical staff intra-time or more;
3) Revised the PE SORs to clearly distinguish the different activities of the two clinical staff on lines 44 and 45 as they are completing different forms and performing different work;
4) Adjusted all the equipment by a couple minutes based on the changes in intra-service time; and
5) Discussed a vendor issue that with all of the implanted defibrillator and pacemaker devices where there are circumstances vendor sends a technician in to interpret the devices and in those cases the practice is not bearing the cost. Also in some cases the vendor technician even brings in the device itself and interprets and the practice is not bearing these costs as well. The Subcommittee discussed this may be addressed by a modified -26 and just report the professional interpretation or a -52 modifier and represent a reduced service. However, neither modifier addresses the issue properly. Reporting the professional service only (-26) doesn’t cover the physicians expenses of exam table, office and clinical staff for vital signs and the reduced modifier (-52) does not provide a good proxy. The RUC recommends that this issue will be referred to the CPT Editorial Panel to determine how to appropriately report these cases.

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

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

Stress Transthoracic Echocardiography (TTE) Complete (Tab 26)
Richard Wright, MD (ACC); Thad Waites, MD, Michael Main, MD (ASE)

In the Final Rule for 2016 CMS re-ran the high expenditure services across specialties with Medicare allowed charges of $10 million or more. CMS identified the top 20 codes by specialty in terms of allowed charges, excluding 010 and 090-day global services, anesthesia and Evaluation and Management services and services reviewed since CY 2010. CPT code 93351 was identified as part of this screen.

93350 Echocardiography, transthoracic, real-time with image documentation (2D), includes M-mode recording, when performed, during rest and cardiovascular stress test using treadmill, bicycle exercise and/or pharmacologically induced stress, with interpretation and report
The RUC reviewed the survey responses from 96 cardiologists and determined that the current work RVU of 1.46, which is below the survey 25th percentile of 1.52, appropriately accounts for the work required to perform this service. The RUC recommends 5 minutes of pre-service time, 15 minutes of intra-service time and 10 minutes of post-service time. The RUC compared the surveyed code to CPT code 95865 Needle electromyography; larynx (work RVU=1.57 and 15 minutes intra-service time) and noted that the survey code has more intra-service and total time, while only having slightly lower intensity of physician work, justifying a similar valuation. The RUC also 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 17 minutes intra-service time) and 99203 Office or other outpatient visit for the evaluation and management of a new patient (work RVU = 1.42 and 20 minutes intra-service time), which demonstrate that the surveyed service is appropriate relative to other similar services in the physician payment schedule. The RUC recommends a work RVU of 1.46 for CPT code 93350.

The RUC noted that if CPT code 93350 is separately reported with 93018 Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; interpretation and report only (work RVU = 0.30 and 5 minutes intra-service time) the resulting work RVU and intra-service time equal the same as what is recommended for these services bundled together, (1.46+0.30=1.76 work RVUs and 15 minutes + 5 minutes intra-service time = 20 minutes intra-service time), which is CPT code 93351 (work RVU = 1.75 and 20 minutes intra-service time). Therefore, the RUC determined that 93350 and 93351 are correctly valued.

93351 Echocardiography, transthoracic, real-time with image documentation (2D), includes M-mode recording, when performed, during rest and cardiovascular stress test using treadmill, bicycle exercise and/or pharmacologically induced stress, with interpretation and report; including performance of continuous electrocardiographic monitoring, with supervision by a physician or other qualified health care professional

The RUC reviewed the survey responses from 104 cardiologists and determined that the current work RVU of 1.75, which is the survey 25th percentile, appropriately accounts for the work required to perform this service. The RUC recommends 10 minutes of pre-service time, 20 minutes of intra-service time and 10 minutes of post-service time. The RUC compared the surveyed code to the top key reference service 78452 Myocardial perfusion imaging, tomographic (SPECT) (including attenuation correction, qualitative or quantitative wall motion, ejection fraction by first pass or gated technique, additional quantification, when performed); multiple studies, at rest and/or stress (exercise or pharmacologic) and/or redistribution and/or rest reinjection (work RVU = 1.62 and 20 minutes of intra-service time) and noted that 68% of the respondents that selected 78452 as the key reference code indicated that the surveyed code was more intense and complex. The RUC also referenced MPC codes 74176 Computed tomography, abdomen and pelvis; without contrast material (work RVU = 1.74 and 22 minutes intra-service time) and 92004 Ophthalmological services: medical examination and evaluation with initiation of diagnostic and treatment program; comprehensive, new patient, 1 or more visits (work RVU = 1.82 and 25 minutes intra-service time), which demonstrate that the surveyed service is appropriate relative to other similar services in the physician payment schedule. The RUC recommends a work RVU of 1.75 for CPT code 93351.

The RUC noted that if CPT code 93350 is separately reported with 93018 Cardiovascular stress test using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; interpretation and report only (work RVU = 0.30 and 5 minutes intra-service time), the resulting work RVU and intra-service time equal the same as what is recommended for these services bundled together, (1.46+0.30=1.76 work RVUs and 15 minutes + 5 minutes intra-service time = 20 minutes intra-service time), which is CPT code 93351. Therefore, the RUC determined that 93350 and 93351 are correctly valued.
Practice Expense
The Practice Expense Subcommittee modified the direct practice expense inputs reducing monitoring from 8 minutes to 5 minutes to account for any multi-tasking; moved 3 minutes for Check dressings & wound/ home care instructions /coordinate office visits /prescriptions from line 61 to line 62 to represent the RN/LPM/MTA blend, changed equipment changed form a workstation to a PACS workstation and appropriate minutes of 20 minutes for the 93350 and 30 minutes for the 93351 and deleted exam table which is part of the ultrasound room. The RUC recommends the direct practice expense inputs as modified by the Practice Expense Subcommittee.

Percutaneous Allergy Skin Tests (Tab 27)
Donald Aaronson, MD (ACAAI); Cheryl Walker McGill, MD (AAAAI); Paul Fass, MD (AAOA)

In the Proposed Rule for 2016 CMS re-ran the high expenditure services across specialties with Medicare allowed charges of $10 million or more. CMS identified the top 20 codes by specialty in terms of allowed charges, excluding 010 and 090-day global services, anesthesia and Evaluation and Management services and services reviewed since CY 2010.

The RUC recommended, in its comment letter, that code 95004 be removed from the screen because it has a work RVU of 0.01 and the RUC stated that it would serve little purpose to survey physician work for this code. The RUC and CMS have previously determined that there is physician work involved in providing this service since the physician must interpret the test and prepare a report. In the Final Rule for 2016, CMS disagreed with the RUC and indicated that the work and practice expense for this service should be reviewed. The specialty societies surveyed this service for review at the October 2016 RUC meeting.

95004 Percutaneous tests (scratch, puncture, prick) with allergenic extracts, immediate type reaction, including test interpretation and report, specify number of tests

The RUC reviewed the survey data from 138 allergy and immunology physicians and noted that while the survey physician per test time is higher than the current inputs, the individual physician work per test has not changed since the last valuation in 2008. Therefore, the RUC agreed with the specialty societies that the current physician time components should be maintained. The RUC recommends the following physician time (per test): pre-service time of 0.125 minutes, intra-service time of 0.125 minutes, and post-service time of 0.125 minutes. The RUC discussed in detail that there is no duplication of work with the Evaluation and Management (E/M) service that is typically reported on the same date of service. The pre-service work includes more than just ordering the test. The physician is ordering a wide array of specific allergens at specific dosages to determine an appropriate panel for patient allergy testing. While it depends somewhat on geography, there are more than 100 available antigens that need to be distilled to fit the unique patient and their history. The RUC agreed that this requires more work than simply writing orders for such tests as a chest x-ray or urinalysis which is not variable per patient or per allergen. The RUC also agreed that physical interpretation of each test and a written report of this interpretation was also not duplicative of what would be included in an E/M service.
The RUC reviewed the survey responses for physician work and recommends a work RVU of 0.01 (per test), which is the survey 25th percentile and current work RVU for 95004. The specialties noted that the current survey for a battery of 50 tests which is the median for Medicare patients resulted in more time than the previous survey for a battery of 40 test based on the national population, however the per test time and work did not change. The RUC agreed that accepting the current value for this code is appropriate and there is no evidence to suggest that the work per test has changed.

The RUC noted the difficulty in finding comparison codes due to the extremely low work RVU and time components. The RUC reviewed the following reference codes to support a work RVU of 0.01 for 0.375 minutes of physician time: 17003 Destruction (eg, laser surgery, electrosurgery, cryosurgery, chemosurgery, surgical curettement), premalignant lesions (eg, actinic keratoses); second through 14 lesions, each (work RVU=0.04, 1 minute total time), 77051 Computer-aided detection (computer algorithm analysis of digital image data for lesion detection) with further review for interpretation, with or without digitization of film radiographic images; diagnostic mammography (work RVU=0.06, 1 minute total time), 71010 Radiologic examination, chest; single view, frontal (work RVU= 0.18, 5 minutes total time), 95145 Professional services for the supervision of preparation and provision of antigens for allergen immunotherapy (specify number of doses); single stinging insect venom (work RVU=0.06, 2 minutes total time), 96361 Intravenous infusion, hydration; each additional hour (work RVU=0.09, 3 minutes total time), and 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 and intra time = 5 minutes). Finally, the RUC noted that there is clearly defined physician work for CPT code 95004. **The RUC recommends a work RVU of 0.01 for CPT code 95004.**

**Practice Expense:**

The specialty societies presented compelling evidence that the current PE inputs may be inaccurate to reflect current practice patterns. First, the specialties noted a flawed methodology was used to arrive at the current inputs. CPT code 95004 was first reviewed in 2002 as part of the early PEAC process. The PE input recommendations from the specialty society were derived from survey results. However, those survey results were rejected and clinical staff times were assigned by the PEAC as if the testing was performed by the physician even though the testing is performed by clinical staff and the physician work is test interpretation and report.

Second, there has been a change in practice standards. The Practice Parameters for diagnostic allergy testing were updated in 2008, after this code was previously reviewed. In years prior to this update, tests were read using a semi-qualitative measure instead of a quantitative measure. Specifically, tests were previously read and documented using a subjective scale (0 to 4+). The new practice parameters indicated that both erythema and wheal should be measured and recorded in millimeters for appropriate comparisons with positive (ie, histamine) and negative controls (ie, 50% glycerinated extracts). This has increase clinical staff time.

The Practice Expense Subcommittee accepted compelling evidence that the current PE inputs may be misvalued.
During the discussion of this code, it was communicated to the specialties that it would be more accurate to assign the total amount of time it takes to perform a typical panel of 50 tests and then divide this time by 50, rather than reverse calculate the time from the previously derived time fraction (per test) multiplied by 50. This also applied where clinical labor activities have standards (eg, if the standard for positioning is 2 minutes, the per test positioning time is 2 minutes divided by 50). The PE Subcommittee particularly focused on two areas: preparing the room/equipment/supplies and recording of test results. For the battery of tests, clinical staff will review the physician orders, prepare testing supplies, and document allergens, strengths, expiration dates, and lot numbers in the patient's electronic medical record. The PE Subcommittee agreed this would take 10 minutes for a battery of 50 tests or 0.2 minutes per test. With respect to measuring and recording the tests, the clinical staff will record the skin reaction to each test (longest diameter of the wheal and surrounding erythema/flare evaluation in millimeters). This will be documented in the patient chart. Clinical staff will then be present when the physician examines the skin reactions and measurements and determine if any measurements need to be redone. The PE Subcommittee agreed this would take 25 minutes for a battery of 50 tests or 0.5 minutes per test.

Finally, following the presentation at the PE Subcommittee, the specialty societies submitted detailed invoices for new and updated supply items to be included in the RUC recommendations to CMS. The RUC approved the revised PE inputs, as modified by the Practice Expense Subcommittee.

**Continuous Glucose Monitoring (Tab 28)**

Felice Caldarella, MD, FACP, FACE, CDE, Howard Lando, MD, FACE, David Klonoff, MD (AACE); Allan Glass, MD (ES)

Facilitation Committee #2

In April 2013, CPT code 95251 was identified through the High Volume Growth screen and the RUC recommended surveying 95251 and 95250 for January 2014. In May 2014, the CPT Editorial Panel created two Category I codes to report continuous glucose monitoring via patient managed “real time” monitoring device and revised two Category I codes to report continuous glucose monitoring via provider managed “retrospective” monitoring device. At the September 2014 RUC meeting, the specialty requested withdrawal of CPT codes 9525X1 and 9525X2 in order to take these codes back to CPT to restructure and better define the timeframe described. The specialty society communicated with the CPT Editorial Panel to rescind codes 9525X1 and 952X2 in order to take these codes back to CPT to restructure and better define the timeframe described. The specialty society indicated there is new information to present to the Relativity Assessment Workgroup. The specialty societies request that the Workgroup review its action plan at the April 2016 meeting. In April 2016, the specialty societies indicated that the growth of these services has steadied in the most recent five years and should be removed from the screen. The Workgroup noted that the 2013 Workgroup recommendation was to survey these services based on the high growth in the years examined and these services have not been reviewed in over ten years. CPT codes 95250 and 95251 were surveyed for October 2016.
95251 Ambulatory continuous glucose monitoring of interstitial tissue fluid via a subcutaneous sensor for a minimum of 72 hours; interpretation and report
The RUC reviewed the survey results from 46 endocrinologists and recommend the following physician time components: pre-service time of 2 minutes, intra-service time of 15 minutes and immediate post-service time of 3 minutes. The RUC noted that this code is typically billed with an Evaluation and Management (E/M) service on the same day. Therefore, the pre-service evaluation time was reduced from a median time of 6 minutes to 2 minutes and the immediate post-service time was reduced from a survey time of 10 minutes to 3 minutes. Finally, the RUC extensively discussed and agreed that there is still distinct work in the pre- and post-service period separate from the E/M service. Specifically the physician must spend time obtaining the CGM reports for review and in the post-service period signs off on the report and communicates with the patient and/or other healthcare professional as needed.

The RUC reviewed the survey respondents’ estimated physician work values and agreed that the survey 25th percentile work RVU of 0.70 accurately accounts for the physician work involved in code 95251. To justify a work RVU of 0.70, the RUC compared the surveyed code to the following reference codes: 93970 Duplex scan of extremity veins including responses to compression and other maneuvers; complete bilateral study (work RVU= 0.70), 74247 Radiological examination, gastrointestinal tract, upper, air contrast, with specific high density barium, effervescent agent, with or without glucagon; with or without delayed images, with KUB (work RVU= 0.69) and 62368 Electronic analysis of programmable, implanted pump for intrathecal or epidural drug infusion (includes evaluation of reservoir status, alarm status, drug prescription status); with reprogramming (work RVU= 0.67). All three reference codes have identical intra-service time to the surveyed code (15 minutes) and represent a spectrum of services that provide reasonable brackets around the recommended value. The RUC recommends a work RVU of 0.70 for CPT code 95251.

CPT Referral:
At the Practice Expense Subcommittee, there was extensive discussion around the issue of what codes are appropriate to report when the patient owns the equipment versus when the practice owns the equipment. The specialties clarified that CPT code 95250 Ambulatory continuous glucose monitoring of interstitial tissue fluid via a subcutaneous sensor for a minimum of 72 hours; sensor placement, hook-up, calibration of monitor, patient training, removal of sensor, and printout of recording, since it is a PE-only code, should not be reported when the equipment is owned by the patient. In this scenario, only CPT code 95251 Ambulatory continuous glucose monitoring of interstitial tissue fluid via a subcutaneous sensor for a minimum of 72 hours; interpretation and report would be reported. The RUC agreed with the Subcommittee that it is important that either education or a CPT parenthetical be created to clarify the appropriate reporting of these services. The RUC recommends this service be referred to the CPT Editorial Panel Executive Committee to provide a solution to ensure correct coding occurs.

Practice Expense:
The RUC reviewed and accepted the direct PE 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.
IX. **Practice Expense Subcommittee (Tab 29)**

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

- **Practice Expense Spreadsheet Update Workgroup**
  Doctor Manaker noted that Doctor Ouzounian and this Workgroup have worked since October 2015, to standardize the clinical labor activities on the PE spreadsheet. The Workgroup also approved several other modifications. In regards to the clinical labor activities, the Workgroup has created 53 unique clinical labor activities that each has its own code. This reflects a reduction from over 800 unique activities currently. The other modifications to the spreadsheet include an automated feature to populate the staff type information and a dropdown for equipment items to state which formula to use. CMS officials stated that they will continue working with the Workgroup to determine if it is possible to automate the equipment time calculation.

  Doctor Manaker stated that the revised spreadsheet will be rolled out for the April 2017 RUC meeting. However, limited pilot testing is available and interested specialty staff should contact AMA staff. **The PE Subcommittee recommends that the RUC accept the revised PE spreadsheet. This spreadsheet will become mandatory for the April 2017, with a limited number of specialties available to test pilot for the January 2017 meeting. The work related to identifying the universe of abnormal equipment formula scenarios will continue.**

- **Potential Screen Using Claims Data for Site of Service in the Non-Facility Setting**
  At the April RUC meeting, the PE Subcommittee discussed that moving forward AMA staff will run claims data to identify the dominant specialty in the non-facility setting. This is to ensure the typical provider is providing PE recommendations for the typical setting type. The Subcommittee discussed with several specialties on these issues at this meeting. AMA staff agreed that they will contact specialties who are dominant only in the non-facility setting, to ensure they are aware of their obligation to be involved in the creation of the PE input recommendations. Finally, if the non-facility dominant specialty is unwilling to participate, the Subcommittee discussed that one potential option is to recommend no non-facility PE inputs, in the same manner as when no specialty indicates an interest in a code. Before considering any final decisions, the Subcommittee will continue to monitor the issue and assess necessary guidelines to ensure accurate PE inputs are being recommended to CMS.

- **Scope Systems and Endoscopes Workgroup**
  In the Proposed Rule for CY2017, CMS outlined a pricing structure that separated out the components for scopes, scope video systems, and scope accessories. CMS also requested comment on the appropriate endoscopic equipment and supplies for endoscopic procedures. Because of the complexity of the issues CMS raised and the need to incorporate input from all specialty societies, the RUC submitted comments to CMS that the best approach to this issue is to form a Workgroup and review the Agency’s issues. The goal of this workgroup would be to provide more definitive recommendations that would create consistency across all the disparate services.
Doctor Manaker created the Scope Systems and Endoscopy Workgroup and appointed Doctor Greg Barkley to Chair the workgroup. Doctors Mollie MacCormack and Stephen Sentovich also volunteered. The Workgroup, with participation from interested specialties and staff, will meet via conference call prior to the January 2017 RUC meeting.

- **Standard Equipment Related to Non-Moderate Sedation Post-Procedure Monitoring**
  Because moderate sedation will now be a separately billable service, there is no longer a need for standard moderate sedation monitoring equipment. However, there remains post-procedure monitoring that will continue to be necessary. The PE Subcommittee discussed what equipment, if any, should be standard for post-procedure monitoring equipment (not related to moderate sedation).

  Additionally, the issue of the proper allocation of oxygen for services done with moderate sedation was discussed. The recommendations for the stand alone moderate sedation codes under consideration by CMS for CY 2017 do not include oxygen in the supplies. Therefore, it needs to be determined if oxygen as a supply should continue to be included on a code by code basis or if it needs to be included in the newly created moderate sedation codes.

Doctor Manaker created the Non-Moderate Sedation Equipment Workgroup and appointed Doctor Neal Cohen to Chair the workgroup. Doctors Zeke Silva, Joseph Cleveland and W. Bryan Sims also volunteered. The Workgroup will meet via conference call prior to the January 2017 RUC meeting.

- **New Business**
  The Subcommittee did have significant discussions around how long the pre-service education and obtain consent should take. Typically MR codes have received 7 minutes in the non-contrast codes and 9 minutes for each contrast code. The Subcommittee discussed that with the profusion of this technology over many years many patients have received multiple scans prior and are familiar with the question and answer process. Furthermore, while it is true that the safety check list must be read through each visit, the list is still standardized and efficiencies have been made in the process. At this meeting, the Subcommittee agreed on an increment of 5 minutes for “non-contrast” codes and 7 minutes for “with contrast” codes. However, the members agreed that to ensure consistency, the consent/education time for the entire set of MR codes should be analyzed. In addition, they should be compared to the “with” and “without contrast” CT codes as well. **AMA staff will run this analysis for Subcommittee review at the January 2017 RUC meeting.**

X. **Research Subcommittee (Tab 30)**

Doctor Doug Leahy, Chair, provided a summary of the Research Subcommittee report:

- The Subcommittee reviewed and accepted the June 2016 Research Subcommittee conference call report.
- **Guidance on how to re-survey Biopsy of Skin Lesion**
At the April 2016 RUC meeting, the RUC discussed an article published on April 19th on a Dermatology News Website which may provide a potential conflict for the re-survey process for Biopsy of Skin Lesion, irrespective of whether a coding change occurs for Skin Biopsy. The RUC decided to refer the issue to the Research Subcommittee for guidance on how to properly re-survey these codes. Following a brief discussion, the Research Subcommittee recommended for the specialty to draft and submit a screening question for inclusion in the survey instrument which would determine whether the survey respondent had read an article. The society then would be requested to submit their survey summary data both separate and together.

- **Requirement to Present Summary Data to RUC if Survey is Conducted**

In 2014, a RUC member brought up a concern regarding the current ability for specialty societies to conduct a survey and then request to resurvey, without ever having to submit a summary of the original survey data to the RUC. The RUC member proposed that if a survey is conducted, then a summary of the original data would need to be submitted to the RUC. This issue was referred to the Research Subcommittee and discussed at the September 2014 meeting. The Research Subcommittee did not recommend the adoption of the proposal at that time. Instead, the Subcommittee requested for AMA staff to track the occurrences and will re-evaluate the issue in two years, at the October 2016 meeting.

Following a brief discussion, the Research Subcommittee decided to table this issue for the January 2017 meeting and for AMA staff to provide historical information which also showed when societies requested resurvey but also provided the summary data. The Subcommittee also noted that they could develop draft guidelines which would codify when it is appropriate for societies to request resurvey.

As part of the discussion of this topic, one Subcommittee member expressed their concern with societies also being able to resubmit a poorly received practice expense recommendation by requesting to conduct a practice expense (PE) survey following a recommendation by the PE Subcommittee. The Chair and AMA staff will discuss this with the Chair of the PE Subcommittee for more information and the Research Subcommittee will also discuss this issue at the January 2017 meeting.

- **Determining how recently the respondent last performed the survey code**

At the April 2016 RUC meeting, during Other Business, a RUC member suggested updating the survey instrument to capture whether the survey respondent has performed the service in the recent past, the distant past, or are just familiar with it. This suggestion coincided with the RUC adding text to the beginning of the survey instrument stating that surveys should only be completed for codes that the respondent has either performed or is familiar with. In addition, the RUC survey captures whether the survey respondent has performed the procedure in the past year.

Following a brief discussion, the Subcommittee agreed that the current survey questions on performance rate capture the necessary data on service performance.
• Review Reference Service List (RSL) Instructions and Guidelines

During the June 7th Research Call, a Research Subcommittee member suggested that the Subcommittee review the RSL instructions and requirements at an upcoming Subcommittee meeting to assess whether the document should be clarified or revised.

Following a review of the current RSL Guidelines, the Subcommittee agreed to the following language changes to the bulleted section of the guidelines:

- Include codes from the MPC list
- Include RUC recently validated codes. Avoid codes that are Harvard or CMS/Other.
- Include a broad range of services (i.e. 10-20 services) and their work RVUs. Select a set of references for use in the survey that is not so narrow that it would appear to compromise the objectivity of the survey result by influencing the respondent’s evaluation of a service
- Include codes that represent services on the list which are well understood and commonly provided by physicians in the specialty or subspecialty. Accordingly, a specialty society’s reference service list may vary based on the new/revised code being surveyed
- Include similar or related codes from the same family or CPT section as the new/revised code (For example, if you are surveying minimally invasive procedures such as laparoscopic surgery, include other minimally invasive services.)
- Include recently RUC validated codes.
- Include codes with the same global period as the new/revised code
- Include several high volume codes typically performed by the specialty, if appropriate.

The Subcommittee noted that these changes are viewed as interim and they will discuss whether further changes to the guidelines are necessary at a future Subcommittee meeting.

• Other Business
  o Anesthesia Workgroup Report

  Doctor Collins provided a general overview of the workgroup’s report from its July 18th conference call included in Tab 30 of the October 2016 agenda materials.

  o Research Subcommittee Guidelines and Requirements Document

  The Research Subcommittee discussed its Guidelines and Requirements document and agreed that the current version of the document is appropriate and does not require any revisions.

  o Intensity and Complexity Addendum Pilot

  As approved by the Time-Intensity Workgroup and the RUC at the April 2016 RUC meeting, all October 2016 survey codes were requested to have a completed Intensity & Complexity addendum table to pilot a new method of reporting Intensity & Complexity summary data.
As recommended by Carol Kane, PhD, AMA Principal Economist and approved by the Chair of the Time-Intensity Workgroup, the addendum table was updated over the summer to include percentage distribution for each intensity and complexity question.

During a brief discussion at the October meeting, several Subcommittee members noted that the new addendum table makes intensity/complexity data relatively much easier to interpret and more useful relative to the current scores included in the Summary of Recommendation form.

The Research Subcommittee approved the new intensity and complexity summary tables with the understanding that they may be modified going forward. The Subcommittee noted that if the Time-Intensity Workgroup modified the proposal, the Subcommittee would wish to discuss the proposal electronically shortly after the October RUC meeting.

The RUC approved the Research Subcommittee Report.

XI. Time and Intensity Workgroup (Tab 31)

Doctor Scott Collins, Workgroup Chair, provided a summary of the Time-Intensity Workgroup report:

- **RUC Survey Physician Time Question – Precision of physician time data**

At the December 2015 Time-Intensity Workgroup meeting, as part of a discussion on measuring physician time, several Workgroup members noted that survey results often appear that the survey respondents tend to round to the nearest 5 minute or 15 minute increment instead of providing estimates to the nearest minute. The Research Subcommittee discussed this issue at its April 2016 meeting. At that time, several Research Subcommittee members noted that language requesting for the survey respondent “not to round” and/or to be “as precise as possible” should be incorporated in the proposed text. Following discussion, the Subcommittee referred this issue to the Time-Intensity Workgroup for further discussion.

At the October meeting, the Time-Intensity Workgroup discussed this issue in detail. Following the discussion of several ideas, the Workgroup agreed that the language should not be too complicated or provide any restrictive guidance. One Workgroup member suggested the custom language that the Research Subcommittee had previously approved for the survey template for tab 13 Strapping Multi-Layer Compression, with minor modification, which is listed below.

The Time-Intensity Workgroup recommends for the question text to be modified as follows:

**Question 2 (from RUC Online Survey Tool):** How much of your own time is required per patient treated for each of the following steps in patient care related to this procedure? **It is important to be as precise as possible. For example, indicate 3 or 6 minutes instead of rounding to 5 minutes or indicate 14 or 17 minutes**
instead of rounding to 15 minutes. Indicate your time for the survey code(s) (in minutes) in each box below. If you do zero minutes for one of the below time components, then you would need to put 0.

Please refer to the information above for a list of definitions.

This recommendation will be forwarded to the Research Subcommittee for the Subcommittee’s consideration.

- **Review Survey Intensity/Complexity Summary Data Pilot and Recommend whether to Implement as part of SOR**

As approved by the Time-Intensity Workgroup and the RUC at the April 2016 RUC meeting, all October 2016 survey codes were requested to have a completed Intensity & Complexity addendum table to pilot a new method of reporting Intensity & Complexity summary data. As recommended by Carol Kane, PhD, AMA Principal Economist and approved by the Chair of the Time-Intensity Workgroup, the addendum table was updated over the summer to include percentage distribution for each intensity and complexity question.

The Time-Intensity Workgroup discussed the addendum pilot in detail with many Workgroup members noting that the new addendum table makes intensity/complexity data much easier to interpret and more useful compared to the current scores included in the Summary of Recommendation (SOR) form. Some Workgroup members expressed their interest in having a more gradual transition, where both the current scores would be reported in the SOR and the addendum table would continue to be separate from the SOR. **The Time-Intensity Workgroup recommends for the addendum table to be made permanent (as provided below), though for the SOR to still also keep the current Intensity & Complexity summary scores for the January 2017 meeting.**

The Workgroup will discuss this issue again at the January 2017 RUC meeting to determine whether the addendum should replace the current measures in the SOR and whether the new summary data should be applied to the top two key reference codes. The SOR itself would still capture intensity & complexity data for the top key reference code and the 2nd key reference code, whereas for the January 2017, the addendum would continue to only include data on the top key reference code.

### AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
**SURVEY INTENSITY & COMPLEXITY ADDENDUM TABLE**

<table>
<thead>
<tr>
<th>Survey Code</th>
<th># of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey Code Descriptor</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Top Ref Code</th>
<th># of Respondents</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Ref Code Descriptor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Intensity and Complexity:</td>
<td>Survey Code Compared to Top Ref Code</td>
<td></td>
</tr>
<tr>
<td>----------------------------------</td>
<td>--------------------------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Survey Code is:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Much Less</td>
<td>Somewhat Less</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mental Effort and Judgment:</th>
<th>The number of possible diagnosis and/or number of management options that must be considered</th>
<th>Less</th>
<th>Identical</th>
<th>More</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed</td>
<td>Less</td>
<td>Identical</td>
<td>More</td>
</tr>
<tr>
<td></td>
<td>Urgency of medical decision making</td>
<td>Less</td>
<td>Identical</td>
<td>More</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Technical Skill:</th>
<th></th>
<th>Less</th>
<th>Identical</th>
<th>More</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Physical Effort:</th>
<th></th>
<th>Less</th>
<th>Identical</th>
<th>More</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Psychological Stress:</th>
<th>The risk of significant complications, morbidity and/or mortality</th>
<th>Less</th>
<th>Identical</th>
<th>More</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Outcome depends on the skill and judgment of physician</td>
<td>Less</td>
<td>Identical</td>
<td>More</td>
</tr>
<tr>
<td></td>
<td>Estimated risk of malpractice suite with poor outcome</td>
<td>Less</td>
<td>Identical</td>
<td>More</td>
</tr>
</tbody>
</table>

As part of the discussion of the intensity and complexity measures, the Workgroup observed that in addition to the overall intensity question, there are currently 8 other component questions which seems too granular. Several Workgroup members noted their belief that the intensity and complexity questions should be collapsed into fewer questions. One Workgroup member suggested that the 3 Mental Effort and Judgment questions and the 3 psychological stress questions should each be collapsed into a single question, respectively. Several Workgroup members noted their belief that this would help improve survey response rates while also providing a sufficient amount of data for the RUC to review. The Time-Intensity Workgroup recommends for the Research Subcommittee to consider only having 5 total intensity and complexity questions: Mental Effort and Judgement, Technical Skill, Physical Effort, Psychological stress and Overall intensity. Also, the Workgroup recommends for the definitions for each component of intensity and complexity to remain unchanged.
• **Descriptive and Analytic Statistical Analysis – Discussion with Carol Kane PhD, AMA Principal Economist**

Carol Kane PhD, AMA Principal Economist in the AMA Economic and Health Policy Research Department, met with the Time-Intensity Workgroup to discuss RUC survey data and whether the RUC should require any new descriptive or analytic data. Dr. Kane is widely regarded as an expert on survey methodologies. The Workgroup had a productive conversation with Dr. Kane, which is summarized in more detail in the Research Subcommittee Report.

• **Pre-service and Post-service Time Packages**

  *a. Make changes to Pre-time packages 1B and 2B to remove Moderate Sedation*

CMS and the RUC originally bundled moderate sedation services into over 400 000-day, 010-day, 090-day and XXX global codes, which are listed in Appendix G of the CPT book. Physician time for administration of moderate sedation was bundled into Appendix G services by CMS and the RUC based on assigned RUC pre-service time package 1B (5 minutes of Moderate Sedation time), preservice time package 2B (10 minutes of Moderate Sedation time) or preservice time package 6B (5 minutes of moderate sedation time). The CPT Editorial Panel has created a new code set for separately reporting moderate sedation services. Also, as part of this new coding structure to report moderate sedation services, the Appendix G section of the CPT code set will be deleted for CY2017.

AMA Staff confirmed that line 21 (Administer moderate sedation/observe (wait) anesthesia care) does not apply to general or regional anesthesia wait time, which is instead captured under a separate line item. Also, several members confirmed that packages 1B, 2B and 6B are not used for services that are typically performed with general anesthesia.

**Following a review of the pre-time packages, the Time-Intensity Workgroup recommends for pre-time packages 1B, 2B and 6B to be deleted and also for line 21 of the spreadsheet to be removed.**

  *b. Standard Deduction for pre-service/post-service time for services where E/M is typically reported on the same date of service*

In the CY2017 NPRM, CMS observed that for services administered on the same day as an E/M service, there is some overlap in physician work.

*Excerpt from CY2017 NPRM* “In cases where a service is typically furnished to a beneficiary on the same day as an E/M service, we believe that there is overlap between the two services in some of the activities furnished during the preservice evaluation and postservice time. Our longstanding adjustments have reflected a broad assumption that at least one-third of the work time in both the preservice evaluation and postservice period is duplicative of work furnished during the E/M visit.”

The RUC has accounted for this in the past on a case-by-case basis. The Time-Intensity Workgroup discussed this issue and expressed interest in developing a more standardized approach (such as standard time deduction(s)) to addressing services which are typically performed on the same day as an E/M service. A Workgroup member noted some type of standard deduction may be warranted for both pre and post for services where EM is...
typically reported on the same date of service. The Workgroup tabled this issue until its next meeting and requested for AMA staff to put together a table for an upcoming Time-Intensity Workgroup meeting which would show the history of how the RUC has handled case-by-case deductions in the recent past.

c. Post-service Time Package for Office Setting

There is currently no standard post-time package for office setting. The Workgroup agreed that a series of post-time packages for the office setting should be considered. Using post-time packages 7A Local Anesthesia/ Straightforward Procedure and 8A Local Anesthesia/Complex Procedure as a base for the creation of new packages, the Workgroup noted that time for a written post-operative note is not needed in the office setting. Some members questioned if having a minute to transfer a supine patient should be included in the office setting. Also, the Workgroup noted that there should be a footnote which instructs respondents to add time if general anesthesia is ever typical in the office setting. The Workgroup also questioned whether monitoring patient recovery and stabilization would only apply to moderate sedation. AMA Staff will mock up new time packages with these changes for the Workgroup to consider at a future meeting.

- Further discussion of new intensity/complexity ideas

d. Directly Surveying Physician Intensity (as proposed by STS at April 2016 meeting)

At the April 2016 Time-Intensity Workgroup meeting, the Society of Thoracic Surgeons (STS) presented on their past experience with performing direct physician intensity surveys for the 2005 Five-year Review and for CPT code 33533 CABG, single arterial graft in 2013. Society of Vascular Surgeons (SVS) is the other specialty that also has experience with performing direct intensity surveys. STS explained, for direct intensity surveys, the intensity magnitude estimate asks the survey participant to estimate the average work intensity during the intra-service time of a survey code relative to average work intensities of other established codes contained in the intensity reference intensity list. The participant establishes relativity (rank order and degree of dispersion) between the code being surveyed and the intensities established for the codes in the Reference Intensity List.

The Workgroup recommends that if a specialty has a RUC-approved source of extant physician time data, then that Specialty can use this methodology as supporting evidence for their RUC recommendation, though they would still be required to conduct a RUC survey. The Time-Intensity Workgroup decided to table the item indefinitely.

e. Surveying intra-service work directly

At the April 2016 Workgroup meeting, the Chair proposed the idea of surveying for intra-service physician work RVUs in addition to, or even instead of surveying total work RVU. He noted that reference value table could perhaps be extracted from the MPC list, using reverse building block, and/or using only XXX and ZZZ codes to start and then using the IWPUT calculator to strip pre and post minutes, when codes includes those. The Workgroup briefly discussed this idea during the October meeting and decided to table the idea indefinitely.
f. Ranking surveys

At the April 2016 Workgroup meeting, a member proposed the idea of a ranking survey. Separately from RUC survey, this involves sending out a separate survey asking respondents to simply rank a group of codes in order of their intraservice intensity and/or time and/or intraservice work. This could be applied to each specialties top 20 codes or perhaps large code families. The purpose of this idea is internal validation of existing rank orders and intensities to make sure they have appropriate rank order. AMA staff emailed a mock-up of this idea for the Workgroup prior to the October 2016 meeting for Workgroup review. The Workgroup discussed this briefly and determined to table the idea indefinitely.

g. Inserting survey code into a reference service list

At the April 2016 Workgroup meeting, a member proposed this idea. It involves "Inserting" survey code into a static reference service that is ordered by either intensity or work - this code fits between code a and b and then the respondent is asked to answer intensity questions about those two code in relationship to the new/code under review. The respondent would then be asked to compare the I/C of the survey code to the two codes it was inserted in between. The Workgroup discussed this idea briefly and decided to table it indefinitely.

h. NASA-TLX

The NASA Task Load Index (NASA-TLX) is a subjective, multidimensional assessment tool that rates perceived workload. The NASA-TLX consists of two parts:

Part 1: The total workload is divided into six subscales that are represented on a single page, serving as one part of the questionnaire.

Part 2: The second part of NASA-TLX intends to create an individual weighting of these subscales by letting the subjects compare them pairwise based on their perceived importance. This requires the user to choose which measurement is more relevant to workload. The number of time each is chosen is the weighted score. This is multiplied by the scale score for each dimension and then divided by 15 to get a workload score from 0 to 100, the overall task load index. Many researchers eliminate these pairwise comparisons, though, and refer to the test as "Raw TLX" then.

The Workgroup requested for the Chair, another workgroup member and AMA staff to work together to mock up a demo how NASA-TLX could be applied to a CPT code for review at a future Workgroup meeting. The Workgroup agreed that this demo should only apply to intra-service time. This demo could be tested internally among the Workgroup. Some workgroup members noted that the NASA-TLX has a lot of similarities in wording to the current RUC intensity and complexity measures. Workgroup members also noted that self-assessment of performance is probably not necessary for procedures.

- Scrub, Dress and Wait Intensity

At the April 2016 RUC meeting, the American College of Surgeons (ACS) submitted a letter to the RUC concerning the intensity value of 0.0081 that is assigned to the pre-time component “scrub, dress, wait.” The ACS noted that they continue to have concerns
about the validity of this intensity value in comparison to the intensity of other services. They emphasized that the intent is not to ask for a revaluation of existing RUC work values, but instead is to consider a change in the value of intensity that is used in the IWPUT calculation for the scrub, dress, wait component of pre-service work. The RUC referred this issue to the Time-Intensity Workgroup.

During the Workgroups discussion, it was noted that during the Harvard study, the intensity of 0.0081 was derived by expert panel and not from any quantitative analysis. The Workgroup tabled the discussion of this item until the January meeting. The Workgroup requested for AMA staff to conduct an analyses which looks at variation in scrub/dress/wait (SDW) time across the fee schedule and also which provides the overall scope of how SDW and the other pre-time components impact the fee schedule. A letter that ACS submitted to the Research Subcommittee in 2014 with detailed analyses and rationales will be provided to the Time-Intensity Workgroup in the agenda packet for its next discussion on this topic.

- **Extant Data Sources – Discussion**

  The Workgroup had a brief discussion on Extant Data and determined to table this item indefinitely or until a society submits a request to the RUC for approval of a new Extant Data source.

- **Other Business**

  A Workgroup member proposed a new idea pertaining to another way to try to conduct magnitude estimation. They noted that, if you take a family of codes, establish one of the codes with a value of 1.0 (called the modulus) and then ask the respondents to estimate the value of all the other codes in the sequence by a ratio method (e.g., twice as much, half as much, etc.) you have used a magnitude estimation approach. This is a valid scientific approach from the subfield of Experimental Psychology called psychophysics. Generally the data is "processed" in to a log or geometric scale; the straight arithmetic results are not used. The Workgroup discussed this idea and noted that it would be interesting to have an academic expert attend a future workgroup meeting to explain this concept and their field further. The Chair and AMA staff will try to coordinate for an expert on this field to attend a future Workgroup meeting.

  **The RUC approved the Time-Intensity Workgroup Report.**

**XII. HCPAC Review Board (Tab 32)**

Dr. Jane White provided a summary of the report of the HCPAC Review Board:

Doctor Edith Hambrick from CMS attended the HCPAC meeting and provided a brief CMS update. New CMS staffer, Carol Blackford was introduced and welcomed. Dr. White noted that January will require a longer HCPAC meeting given the potential review of 30+ codes and that members will hear more about scheduling for this in the next few weeks.

The HCPAC members reviewed proposals from several specialties for codes to be added to or removed from the HCPAC MPC list. Representatives from the specialty societies attended the meeting to provide clarity and answer questions from workgroup members.
The following edits to the HCPAC MPC list were approved by motion and verbal vote by the HCPAC members:

- Additions:

<table>
<thead>
<tr>
<th>Code</th>
<th>Long Descriptor</th>
<th>Work RVU</th>
<th>Global</th>
<th>Most Recent RUC Review</th>
<th>2015 Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>10061</td>
<td>Incision and drainage of abscess (eg, carbuncle, suppurative hidradenitis, cutaneous or subcutaneous abscess, cyst, furuncle, or paronychia); complicated or multiple</td>
<td>2.45</td>
<td>010</td>
<td>Oct10</td>
<td>165,338</td>
</tr>
<tr>
<td>11042</td>
<td>Debridement, subcutaneous tissue (includes epidermis and dermis, if performed); first 20 sq cm or less</td>
<td>1.01</td>
<td>000</td>
<td>Feb10</td>
<td>1,628,800</td>
</tr>
<tr>
<td>11044</td>
<td>Debridement, bone (includes epidermis, dermis, subcutaneous tissue, muscle and/or fascia, if performed); first 20 sq cm or less</td>
<td>4.10</td>
<td>000</td>
<td>Apr10</td>
<td>69,570</td>
</tr>
<tr>
<td>11045</td>
<td>Debridement, subcutaneous tissue (includes epidermis and dermis, if performed); each additional 20 sq cm, or part thereof (List separately in addition to code for primary procedure)</td>
<td>0.50</td>
<td>ZZZ</td>
<td>Feb10</td>
<td>328,984</td>
</tr>
<tr>
<td>15275</td>
<td>Application of skin substitute graft to face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits, total wound surface area up to 100 sq cm; first 25 sq cm or less wound surface area</td>
<td>1.83</td>
<td>000</td>
<td>Apr11</td>
<td>85,407</td>
</tr>
<tr>
<td>20600</td>
<td>Arthrocentesis, aspiration and/or injection, small joint or bursa (eg, fingers, toes); without ultrasound guidance</td>
<td>0.66</td>
<td>000</td>
<td>Oct10</td>
<td>415,732</td>
</tr>
<tr>
<td>29530</td>
<td>Strapping; knee</td>
<td>0.39</td>
<td>000</td>
<td>Jan14</td>
<td>47,196</td>
</tr>
<tr>
<td>64450</td>
<td>Injection, anesthetic agent; other peripheral nerve or branch</td>
<td>0.75</td>
<td>000</td>
<td>Sept11</td>
<td>542,035</td>
</tr>
<tr>
<td>64640</td>
<td>Destruction by neurolytic agent; other peripheral nerve or branch</td>
<td>1.23</td>
<td>010</td>
<td>Sept11</td>
<td>97,678</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
<td>Rate</td>
<td>Modifier</td>
<td>Date</td>
<td>Amount</td>
</tr>
<tr>
<td>--------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
<td>-------</td>
<td>----------</td>
<td>--------</td>
<td>---------</td>
</tr>
<tr>
<td>76882</td>
<td>Ultrasound, extremity, nonvascular, real-time with image documentation; limited, anatomic specific</td>
<td>0.49</td>
<td>XXX</td>
<td>Apr10</td>
<td>242,285</td>
</tr>
<tr>
<td>90791</td>
<td>Psychiatric diagnostic evaluation</td>
<td>3.00</td>
<td>XXX</td>
<td>Apr12</td>
<td>886,613</td>
</tr>
<tr>
<td>90832</td>
<td>Psychotherapy, 30 minutes with patient and/or family member</td>
<td>1.50</td>
<td>XXX</td>
<td>Apr12</td>
<td>2,231,938</td>
</tr>
<tr>
<td>90834</td>
<td>Psychotherapy, 45 minutes with patient and/or family member</td>
<td>2.00</td>
<td>XXX</td>
<td>Apr12</td>
<td>5,456,436</td>
</tr>
<tr>
<td>90837</td>
<td>Psychotherapy, 60 minutes with patient and/or family member</td>
<td>3.00</td>
<td>XXX</td>
<td>Apr12</td>
<td>4,588,252</td>
</tr>
<tr>
<td>90839</td>
<td>Psychotherapy for crisis; first 60 minutes</td>
<td>3.13</td>
<td>XXX</td>
<td>Apr13</td>
<td>15,361</td>
</tr>
<tr>
<td>90840</td>
<td>Psychotherapy for crisis; each additional 30 minutes (List separately in addition to code for primary service)</td>
<td>1.50</td>
<td>ZZZ</td>
<td>Apr13</td>
<td>4,664</td>
</tr>
<tr>
<td>90853</td>
<td>Group psychotherapy (other than of a multiple-family group)</td>
<td>0.59</td>
<td>XXX</td>
<td>Apr12</td>
<td>990,757</td>
</tr>
<tr>
<td></td>
<td>* noting hx will be reviewed by staff to ensure ok</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>92507</td>
<td>Treatment of speech, language, voice, communication, and/or auditory processing disorder; individual</td>
<td>1.30</td>
<td>XXX</td>
<td>Feb10</td>
<td>185,900</td>
</tr>
<tr>
<td>92523</td>
<td>Evaluation of speech sound production (eg, articulation, phonological process, apraxia, dysarthria); with evaluation of language comprehension and expression (eg, receptive and expressive language)</td>
<td>3.00</td>
<td>XXX</td>
<td>Jan13</td>
<td>8,525</td>
</tr>
<tr>
<td>92540</td>
<td>Basic vestibular evaluation, includes spontaneous nystagmus test with eccentric gaze fixation nystagmus, with recording, positional nystagmus test, minimum of 4 positions, with recording, optokinetic nystagmus test, bidirectional foveal and</td>
<td>1.50</td>
<td>XXX</td>
<td>Apr09</td>
<td>88,780</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
<td>Units</td>
<td>Date</td>
<td>Amount</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------------------------------</td>
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<td>---------</td>
<td></td>
</tr>
<tr>
<td>92542</td>
<td>Positional nystagmus test, minimum of 4 positions, with recording</td>
<td>0.48</td>
<td>XXX</td>
<td>2014</td>
<td>31,204</td>
</tr>
<tr>
<td>92507</td>
<td>Treatment of speech, language, voice, communication, and/or auditory processing disorder; individual</td>
<td>1.30</td>
<td>XXX</td>
<td>Feb10</td>
<td>185,900</td>
</tr>
<tr>
<td>92567</td>
<td>Tympanometry (impedance testing)</td>
<td>0.20</td>
<td>XXX</td>
<td>Apr07</td>
<td>772,249</td>
</tr>
<tr>
<td>92568</td>
<td>Acoustic reflex testing, threshold</td>
<td>0.29</td>
<td>XXX</td>
<td>Apr07</td>
<td>8,899</td>
</tr>
<tr>
<td>92604</td>
<td>Diagnostic analysis of cochlear implant, age 7 years or older; subsequent reprogramming</td>
<td>1.25</td>
<td>XXX</td>
<td>Apr07</td>
<td>18,492</td>
</tr>
<tr>
<td>95992</td>
<td>Canalith repositioning procedure(s) (eg, Epley maneuver, Semont maneuver), per day</td>
<td>0.75</td>
<td>XXX</td>
<td>Apr08</td>
<td>71,953</td>
</tr>
<tr>
<td>96116</td>
<td>Neurobehavioral status exam (clinical assessment of thinking, reasoning and judgment, eg, acquired knowledge, attention, language, memory, planning and problem solving, and visual spatial abilities), per hour of the psychologist's or physician's time, bot *noting this is slated for deletion in CPT 2018 and will stay on the list until then</td>
<td>1.86</td>
<td>XXX</td>
<td>HCPAC</td>
<td>145,203</td>
</tr>
<tr>
<td>97597</td>
<td>Debridement (eg, high pressure waterjet with/without suction, sharp selective debridement with scissors, scalpel and forceps), open wound, (eg, fibrin, devitalized epidermis and/or dermis, exudate, debris, biofilm), including topical application(s), wound</td>
<td>0.51</td>
<td>000</td>
<td>Oct09</td>
<td>1,037,269</td>
</tr>
<tr>
<td>97802</td>
<td>Medical nutrition therapy; initial assessment and intervention, individual, face-to-face with the patient, each 15 minutes</td>
<td>0.53</td>
<td>XXX</td>
<td>Apr08</td>
<td>218,581</td>
</tr>
<tr>
<td>Code</td>
<td>Long Descriptor</td>
<td>Work RVU</td>
<td>Global</td>
<td>Most Recent RUC Review</td>
<td>2015 Frequency</td>
</tr>
<tr>
<td>--------</td>
<td>---------------------------------------------------------------------------------</td>
<td>----------</td>
<td>--------</td>
<td>------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>97803</td>
<td>Medical nutrition therapy; re-assessment and intervention, individual, face-to-face with the patient, each 15 minutes</td>
<td>0.45</td>
<td>XXX</td>
<td>Apr08</td>
<td>187,689</td>
</tr>
<tr>
<td>97804</td>
<td>Medical nutrition therapy; group (2 or more individual(s)), each 30 minutes</td>
<td>0.25</td>
<td>XXX</td>
<td>July00</td>
<td>5,528</td>
</tr>
</tbody>
</table>

- **Deletions:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Long Descriptor</th>
<th>Work RVU</th>
<th>Global</th>
<th>Most Recent RUC Review</th>
<th>2015 Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>11750</td>
<td>Excision of nail and nail matrix, partial or complete (eg, ingrown or deformed nail), for permanent removal;</td>
<td>1.58</td>
<td>010</td>
<td>Sept14</td>
<td>209,006</td>
</tr>
<tr>
<td>28046</td>
<td>Radical resection of tumor (eg, sarcoma), soft tissue of foot or toe; less than 3 cm</td>
<td>12.38</td>
<td>090</td>
<td>Feb09</td>
<td>209</td>
</tr>
<tr>
<td>28080</td>
<td>Excision, interdigital (Morton) neuroma, single, each</td>
<td>4.86</td>
<td>090</td>
<td>Aug95</td>
<td>5,469</td>
</tr>
<tr>
<td>28114</td>
<td>Ostectomy, complete excision; all metatarsal heads, with partial proximal phalanectomy, excluding first metatarsal (eg, Clayton type procedure)</td>
<td>12.00</td>
<td>090</td>
<td>Aug95</td>
<td>810</td>
</tr>
<tr>
<td>28238</td>
<td>Reconstruction (advancement), posterior tibial tendon with excision of accessory tarsal navicular bone (eg, Kidner type procedure)</td>
<td>7.96</td>
<td>090</td>
<td>Aug95</td>
<td>567</td>
</tr>
<tr>
<td>28293</td>
<td>Correction, hallux valgus (bunion), with or without sesamoidectomy; resection of joint with implant</td>
<td>11.48</td>
<td>090</td>
<td>Aug95</td>
<td>3,397</td>
</tr>
<tr>
<td>28306</td>
<td>Osteotomy, with or without lengthening, shortening or angular correction, metatarsal; first metatarsal</td>
<td>6.00</td>
<td>090</td>
<td></td>
<td>1,702</td>
</tr>
<tr>
<td>29893</td>
<td>Endoscopic plantar fasciotomy</td>
<td>6.32</td>
<td>090</td>
<td>Apr97 (HCPAC)</td>
<td>1,416</td>
</tr>
<tr>
<td>90847</td>
<td>Family psychotherapy (conjoint psychotherapy) (with patient present)</td>
<td>2.50</td>
<td>XXX</td>
<td>Apr12</td>
<td>192,835</td>
</tr>
</tbody>
</table>

*noting this could still be used on the RSL.
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Unit Price</th>
<th>Description</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>95831</td>
<td>Muscle testing, manual (separate procedure) with report; extremity (excluding hand) or trunk</td>
<td>0.28</td>
<td>XXX</td>
<td>114,202</td>
</tr>
<tr>
<td>95851</td>
<td>Range of motion measurements and report (separate procedure); each extremity (excluding hand) or each trunk section (spine)</td>
<td>0.16</td>
<td>XXX CMS/Other</td>
<td>19,356</td>
</tr>
<tr>
<td>97001</td>
<td>Physical therapy evaluation</td>
<td>1.20</td>
<td>Apr97 (HCPAC)</td>
<td>2,503,430</td>
</tr>
<tr>
<td>97002</td>
<td>Physical therapy re-evaluation</td>
<td>0.60</td>
<td>Apr97 (HCPAC)</td>
<td>533,642</td>
</tr>
<tr>
<td>97003</td>
<td>Occupational therapy evaluation</td>
<td>1.20</td>
<td>Apr97 (HCPAC)</td>
<td>190,584</td>
</tr>
<tr>
<td>97004</td>
<td>Occupational therapy re-evaluation</td>
<td>0.60</td>
<td>Apr97 (HCPAC)</td>
<td>30,994</td>
</tr>
<tr>
<td>97012</td>
<td>Application of a modality to 1 or more areas; traction, mechanical</td>
<td>0.25</td>
<td>May94</td>
<td>565,044</td>
</tr>
<tr>
<td>97018</td>
<td>Application of a modality to 1 or more areas; paraffin bath</td>
<td>0.06</td>
<td>May94</td>
<td>133,725</td>
</tr>
<tr>
<td>97022</td>
<td>Application of a modality to 1 or more areas; whirlpool</td>
<td>0.17</td>
<td>May94</td>
<td>176,554</td>
</tr>
<tr>
<td>97032</td>
<td>Application of a modality to 1 or more areas; electrical stimulation (manual), each 15 minutes</td>
<td>0.25</td>
<td>May94</td>
<td>1,149,079</td>
</tr>
<tr>
<td>97035</td>
<td>Application of a modality to 1 or more areas; ultrasound, each 15 minutes</td>
<td>0.21</td>
<td>May94</td>
<td>2,790,964</td>
</tr>
<tr>
<td>97110</td>
<td>Therapeutic procedure, 1 or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility</td>
<td>0.45</td>
<td>May94</td>
<td>49,007,989</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
<td>Value</td>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>97124</td>
<td>Therapeutic procedure, 1 or more areas, each 15 minutes; massage, including effleurage, petrissage and/or tapotement (stroking, compression, percussion)</td>
<td>0.35</td>
<td>XXX</td>
<td>May94</td>
</tr>
<tr>
<td>97140</td>
<td>Manual therapy techniques (eg, mobilization/ manipulation, manual lymphatic drainage, manual traction), 1 or more regions, each 15 minutes</td>
<td>0.43</td>
<td>XXX</td>
<td>May98(HCPAC)</td>
</tr>
<tr>
<td>97530</td>
<td>Therapeutic activities, direct (one-on-one) patient contact (use of dynamic activities to improve functional performance), each 15 minutes</td>
<td>0.44</td>
<td>XXX</td>
<td>May94</td>
</tr>
<tr>
<td>97535</td>
<td>Self-care/home management training (eg, activities of daily living (ADL) and compensatory training, meal preparation, safety procedures, and instructions in use of assistive technology devices/adaptive equipment) direct one-on-one contact, each 15 minutes</td>
<td>0.45</td>
<td>XXX</td>
<td>Feb95 (HCPAC)</td>
</tr>
<tr>
<td>97750</td>
<td>Physical performance test or measurement (eg, musculoskeletal, functional capacity), with written report, each 15 minutes</td>
<td>0.45</td>
<td>XXX</td>
<td>May94</td>
</tr>
<tr>
<td>97755</td>
<td>Assistive technology assessment (eg, to restore, augment or compensate for existing function, optimize functional tasks and/or maximize environmental accessibility), direct one-on-one contact, with written report, each 15 minutes</td>
<td>0.62</td>
<td>XXX</td>
<td>HCPAC</td>
</tr>
</tbody>
</table>

- Retentions - to include those codes specifically discussed for retention as well as other codes not specified for deletion.

The RUC filed the HCPAC Report.

XIII. Administrative Subcommittee (Tab 33)

Review Primary Care Rotating Seat Eligibility Criteria
Doctor Waldorf presented the Administrative Subcommittee report, indicating that the Primary Care Rotating Seat eligibility criteria needed to be updated since the previous criteria required documentation of one’s primary care bonus eligibility and that program ended in 2015. The Subcommittee drafted new language for the criteria for nominee to justify that they are a primary care physician based on 60% of their allowed charges providing primary care services.

A RUC member requested adding the transitional care management services and chronic care management services to the list of services provided when examining the services provided by the candidates. Another RUC member questioned adding a link to examine Medicare services provided by the candidates. The RUC explained that this may be difficult since there is not a central Medicaid database like there is currently for Medicare providers. After extensive discussion the RUC determined that additional edits were necessary and postponed this issue until the January 2017
meetings to discuss further. The Administrative Subcommittee will discuss the following in January 2017:

**Candidate Eligibility**

The RUC approved that subspecialties deemed eligible for the Internal Medicine or other rotating seats, may choose individuals that represent the interest of the subspecialty group and that a board certification in that particular specialty is not a requirement.

The Primary Care rotating seat candidate must be in active clinical practice, with at least 50% of their professional time in direct patient care. The Primary Care rotating seat candidate must present documentation that he/she is defined as a primary care physician by Medicare or Medicaid (i.e., family medicine, geriatric medicine, pediatric medicine or internal medicine) and the candidate’s primary care services (99201-99215, 99304-99350, 99381-99387, 99391-99397, 99487, 99489, 99490, 99495, 99496, G0402, G0438, and G0439, excluding hospital inpatient care and emergency department visits) accounted for at least 60 percent of the practitioners total allowed charges under the physician fee schedule. The Primary Care rotating seat candidate must be a physician with significant experience and expertise in broad-based chronic disease management, comprehensive treatment plan development and management, and preventive care.

Candidates should use the current Medicare Provider Utilization and Payment Data: Physician and Other Supplier PUF CY 2014 file (https://data.cms.gov/Public-Use-Files/Medicare-Provider-Utilization-and-Payment-Data-Physician Utilization and Payment Data-Physician Utilization and Payment Data-Physician Utilization and Payment Data) to demonstrate more than 60 percent of allowed charges are for providing primary care services.

**Review RUC Compelling Evidence Standards**

Doctor Waldorf indicated that in April 2016, a RUC member requested review of the compelling evidence standards regarding the definition and rules. The RUC member noted that when reviewing these standards, the Administrative Subcommittee should consider that in cases when a code is resurveyed and CMS did not accept previous recommended RUC value, compelling evidence based on flawed mechanism (CMS unilateral decision) can be used to recommend a value that is equal to the previous RUC recommended value, but additional compelling evidence would need to be presented if recommended value is higher than the previous recommended value.

The Administrative Subcommittee discussed adding “Compelling evidence is not required for a recommended value that is equal or less than the most recent RUC recommended value.” The Subcommittee did not have time to address multiple items regarding adding compelling evidence standards. The Subcommittee determined that it would discuss the addition of this language to the RUC Rules Regarding Presentation and Evaluation of Work Relative Values Compelling Evidence standards, discuss maintaining rank order anomalies as a compelling evidence standard (since CMS does not accept this as sole compelling evidence) and discuss added other compelling evidence standards such as negative IWPUT at the January 2017 Administrative Subcommittee.

**XIV. Emerging CPT and RUC Issues Workgroup (Tab 34)**

Doctor Raphaelson provided the Emerging CPT and RUC Issues Workgroup report to the RUC.
Doctor Raphaelson noted CMS recognition of this workgroup in the Notice of Proposed Rule Making that was published in July 2016.

Carol Blackford (Director of Hospital and Ambulatory Policy, CMS) was introduced. It was noted discussions of recent CPT actions are not official until the minutes are complete and approved.

**Care Collaboration and Non-Face-to-Face Services: CMS Actions Compared to CPT/RUC Recommendations**

Doctor Hollmann led a discussion of codes that aim to describe collaborative care and non-face-to-face services. CMS actions compared to CPT/RUC recommendations were discussed, as well as additional next steps that this workgroup may pursue. Proposed actions were discussed and decided by the workgroup.

- **No action needed (either currently implemented or being worked on in another capacity but will monitor these over time):**
  - Transitional Care Management, CPT codes 99495 and 99496
  - Anticoagulant Management, CPT codes 99363 and 99364
  - Mobility Impairment, G code GDDD1

- **Reiterate recommendation for CMS to unbundle these services and implement payment at RUC-recommended value:**
  - Medical Team Conference, CPT codes 99366-99368
  - Telephone Services, CPT codes 99441-99443 and 98966-98969
  - Education and Training for Patient Self-Management, CPT codes 98960-98962
  - Analysis of Computer Transmitted Data, CPT codes 99091
  - Interprofessional Consultations, CPT codes 99446-99449

- **Recommendations to CPT:**
  - Recommend that CPT create a code to replace G code GPPP7 *Comprehensive assessment of and care planning by the physician or other qualified health care professional for patients requiring chronic care management services, including assessment during the provision of a face-to-face service (billed separately from monthly care management services) (Add-on code, list separately in addition to primary service)*. CMS has accepted CPT codes 99490, 99487, 99489, and also added a G code to the family.
  - Recommend that CPT create a code to replace G code GPPPX *Care management services for behavioral health conditions, at least 20 minutes of clinical staff time, directed by a physician or other qualified health care professional time, per calendar month. CPT passed set of codes, not yet RUC valued, but intended to be in the 2018 cycle. CMS has adopted the CPT code language into G codes, and also added an additional G code to the family.*
  - Recommend that CPT review G code GPPP6 *Cognition and functional assessment using standardized instruments with development of recorded care plan for the patient with cognitive impairment, history obtained from patient and/or caregiver, by the physician or other qualified health care professional in office or other outpatient setting or home or domiciliary or rest home as described in the coming Final Rule, and reconcile parenthetical and instructions with CPT code approved by the CPT Panel Feb 2016.*
  - Recommend that CPT review Prolonged Services, CPT codes 99358 and 99359 as described in the coming Final Rule. CMS has proposed using these codes as
add-ons to E/M, but the services may be used separately from E/M under CPT. If CMS finalizes these codes as add-ons to E/M, CPT should consider retaining these codes as currently used, and also developing new codes to be used as add-on codes to for same day prolonged services.

Telemedicine/Non-Face-to-Face: Coding Proposals
The workgroup discussed that there are many important coding proposals about telemedicine/non-face-to-face services being discussed at CPT. AMA staff and the CPT Telemedicine Services Workgroup will continue to work closely with applicants to help identify and describe services to be considered for codes.

New Payment Models: Potential New Code Sets
ACEP presented their coding proposal for team-based care/APM coding that was discussed at the October 2016 CPT meeting. There was general discussion of the code proposal as an example of what specialties may wish to consider when putting similar code proposals forward. These new and innovative code set approaches will require continued discussion with the CPT to evaluate how these code proposals can be supported with literature and handled by the CPT Editorial Panel.

This Workgroup, along with the CPT Editorial Panel and RUC will continue to discuss codes required to implement Alternative Payment Models (APMs).

The RUC approved the Emerging CPT and RUC Issues Workgroup Report.

XV. Relativity Assessment Workgroup (Tab 35)

New Technology/New Services
Doctor Hitzeman provided the Relativity Assessment Workgroup report to the RUC. He indicated that the Workgroup reviewed new technology/new service codes that were flagged October 2011-April 2012 with three years of available Medicare claims data (2013, 2014 and preliminary 2015 data). The Workgroup reviewed the following new technology/new services and recommends the following:

<table>
<thead>
<tr>
<th>CPT Code</th>
<th>RAW recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>31647</td>
<td>Remove from list, no demonstrated technology diffusion that impacts work or practice expense.</td>
</tr>
<tr>
<td>31647</td>
<td>Remove from list, no demonstrated technology diffusion that impacts work or practice expense.</td>
</tr>
<tr>
<td>31649</td>
<td>Remove from list, no demonstrated technology diffusion that impacts work or practice expense.</td>
</tr>
<tr>
<td>31651</td>
<td>Remove from list, no demonstrated technology diffusion that impacts work or practice expense.</td>
</tr>
<tr>
<td>32701</td>
<td>Remove from list, no demonstrated technology diffusion that impacts work or practice expense.</td>
</tr>
<tr>
<td>33361</td>
<td>The Workgroup determined that the technology for these services is evolving, 400 cardiology centers now provide these services and have shifted from being provided in academic centers to now private centers. The Workgroup recommends that 33361-33366 be resurveyed for physician work and practice expense for April 2017. The Workgroup did not believe there would be a change in physician work or practice expense for the add-on services and recommends that 33367, 33368 and 33369 be removed from the new technology list as there is no demonstrated diffusion.</td>
</tr>
<tr>
<td>33362</td>
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<tr>
<td>33363</td>
<td></td>
</tr>
<tr>
<td>33364</td>
<td></td>
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<td>33365</td>
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<td>33366</td>
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<td>33367</td>
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</tr>
<tr>
<td>33368</td>
<td></td>
</tr>
<tr>
<td>33369</td>
<td></td>
</tr>
</tbody>
</table>
The specialty societies indicated that they tried to develop a category I code to replace 44705 which is not currently covered by Medicare, but the CPT Editorial Panel did not accept the coding change proposal due to a lack in literature provided. The Workgroup recommended that these services be reviewed in 2 year after additional utilization data is available (October 2018).

The specialty society noted and the Workgroup agreed that the dominant specialties providing the complete versus the limited ultrasound of extremity services are different. Thus, causing variation in what the typical practice expense inputs. The Workgroup recommends to 1) Refer CPT codes 76881 and 76882 to the Practice Expense Subcommittee for review of the direct practice expense inputs; 2) Refer to the CPT Editorial Panel to clarify the introductory language regarding the reference to one joint in the complete ultrasound; and 3) Review again in 3 years (October 2019).

Remove from list, 88152 is on the CLFS and there is no demonstrated technology diffusion that impacts work or practice expense for 88153.

Remove from list, 88152 is on the CLFS and there is no demonstrated technology diffusion that impacts work or practice expense for 88153.

Remove from list, no demonstrated technology diffusion that impacts work or practice expense.

Survey for physician work and review direct practice expense inputs for April 2017. These services have continued to grow and the inclusion of the PACS workstation equipment was questioned.

Remove from list, no demonstrated technology diffusion that impacts work or practice expense.

Reaffirm previous RUC recommendation and request that CMS pay for the interprofessional telephone consultative services separately. The RUC recommends an editorial change to the CPT descriptors to reflect “verbal/written report” rather than verbal and written report.

CMS/Other Source – Utilization over 100,000
Doctor Hitzeman noted that in January 2016 the Workgroup discussed expanding the CMS/Other Source codes screen, lowering the Medicare utilization threshold from 250,000 to 100,000. The Workgroup reviewed the action plans for the list of 27 services and recommends:

<table>
<thead>
<tr>
<th>CPT Code</th>
<th>RAW Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>72020</td>
<td>The Workgroup acknowledged that the low work RVU and physician times will most likely not change however there may be anomalies in the direct practice expense inputs that were never reviewed by the RUC. The Workgroup recommends the specialty societies survey these services for April 2017 with a strong recommendation that the Research Subcommittee consider the specialty societies request to allow direct crosswalks to similar services for physician work and time.</td>
</tr>
<tr>
<td>72072</td>
<td>Survey for April 2017 with codes 74210 and 74230.</td>
</tr>
<tr>
<td>72220</td>
<td>There was a change in physician work, survey for April 2017.</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>76000</td>
<td>The code descriptor states “up to 1 hour”, however the total physician time is 5 minutes. Survey for April 2017.</td>
</tr>
<tr>
<td>76870</td>
<td>Survey for April 2017</td>
</tr>
<tr>
<td>77012</td>
<td>Survey for April 2017</td>
</tr>
<tr>
<td>85060</td>
<td>Survey for April 2017</td>
</tr>
<tr>
<td>85097</td>
<td>Survey for April 2017</td>
</tr>
<tr>
<td>G0101</td>
<td>Remove from the list. G0101 describes a screening pelvic examination (includes a clinical breast examination) and is included in CPT Codes 99394-99397 codes. CMS uses G0101 to reimburse physicians for this specific cancer screening for Medicare patients. Private insurers do not recognize G0101 but, if appropriate, cover the 99384-99387, and 99394-99397 code series. The specialty society indicated and the Workgroup agreed it would disadvantageous to conduct a RUC survey for this carve-out service.</td>
</tr>
<tr>
<td>G0108</td>
<td>Survey for April 2017</td>
</tr>
<tr>
<td>G0109</td>
<td>Survey for April 2017</td>
</tr>
<tr>
<td>G0166</td>
<td>Survey for April 2017</td>
</tr>
<tr>
<td>G0402</td>
<td>Survey for April 2017</td>
</tr>
<tr>
<td>G0403</td>
<td>Survey for April 2017</td>
</tr>
<tr>
<td>G0436</td>
<td>CMS deleted this code as of October 1, 2016. Remove from screen.</td>
</tr>
<tr>
<td>G0442</td>
<td>Survey for April 2017</td>
</tr>
<tr>
<td>G0447</td>
<td>Survey for April 2017</td>
</tr>
<tr>
<td>G0453</td>
<td>Part of new technology services. Remove from list, no demonstrated technology diffusion that impacts work or practice expense.</td>
</tr>
</tbody>
</table>

**Flagged Services - Action Plan Review (57155, 57156 and 75898)**

*Insertion of Uterine Tandem/Ovoids (57155 and 57156)*

Doctor Hitzeman noted that these services were identified in September 2007 via the Site-of-Service Anomaly screen. The specialty societies indicated that the typical patient for 57155 may have changed requiring modification to the descriptor. In October 2009, the CPT Editorial Panel added a new code to report the insertion of a vaginal radiation afterloading apparatus for clinical brachytherapy and revision of 57155 to indicate insertion of a single tandem rather than tandems. In October 2013, AMA staff reviewed the work neutrality impacts for codes reviewed in the CPT 2011 cycle. Work neutrality was appropriately maintained. However, there was one issue where there was a large growth in utilization in the first year for new CPT code 57156. The specialty societies predicted that with the creation of new CPT code 57156, the utilization would be split 50/50 for 57155 and 57156. However, the utilization split was 37/63 for 2011 and 29/71 for 2012. CPT code 57155 originally described multiple tandems and was changed to describe one tandem. The Workgroup reviewed the action plan in which the specialty society indicated that the utilization is appropriate and the split between the two codes is consistent with the current clinical trends. The specialties indicated that there has been a decrease in the incidence of cervical cancer, typically treated with CPT 57155, but there has been an increase in the incidence of endometrial cancer typically treated with CPT 57156. The Workgroup determined it will reassess these services after more data is available. The Workgroup recommended another review of claims data for 57155 and 57156 in 3 years (October 2016).

The societies believe the current estimated RVU split of 35%/65% is consistent with the current clinical trends and supported by consistent Medicare (RUC database) trends. When the Workgroup
reviewed this issue the final recommendation to survey this issue was based on an incorrect data point. The specialty society requested and the Workgroup agreed that this issue be discussed at the January 2017 RAW meeting to clarify and allow the Workgroup to review the correct data.

**Intracranial Endovascular Intervention (75898)**

This service was identified in February 2010 via the Codes Reported Together 75% or More screen. The Workgroup accepted the specialties’ recommendation to submit a code change proposal that would address any duplication when these services are reported together on the same date by the same physician. At the October 2012 RUC meeting, the specialties reiterated to the RUC that under the current coding structure, CPT codes 75896 and 75898 are reported during thrombolytic therapy. However, with the CPT revisions for 2013, these two codes will no longer be reported during thrombolytic therapy. Given this, it is unknown exactly how these two orphan codes will be reported in 2013. The remaining non-thrombolysis use of these codes will be influenced by future CPT Editorial Panel changes. CPT code 75896 will be included in a multi-specialty coding revision effort led by neurosurgery. This coding proposal will describe intracranial infusion other than for thrombolysis (e.g. vasodilators in the setting of cerebral vasospasm). Code 75896 was deleted for CY 2016. CPT code 75898 was addressed in the multi-specialty embolization coding revision in February 2015 and was recommended to be carrier priced. The new codes approved for intracranial thrombolysis and intracranial mechanical thrombectomy are expected to be utilized instead of 75898. The work remaining in 75798 will be appropriately surveyed by physicians who perform such work.

The specialty societies indicated that the utilization of code 75898 decreased dramatically after the first set of bundled codes were approved in 2013; from 48,530 in 2012 to 12,610 in 2014. The specialty societies expect further significant decrease in utilization with the implementation of the new intracranial codes in 2016. The societies requested and the Workgroup agreed to maintain these services at this time and recommend review when 2016 Medicare data becomes available to determine the utilization of this code (October 2018).

**Outstanding Referrals to CPT Editorial Panel – Action Plan Review (75894 & 75984)**

**Transcatheter Procedures (75894)**

CPT code 75894 was identified in February 2010 via the Code Reported Together 75% or More screen. The RUC accepted the specialty societies’ recommendation to refer to the CPT Editorial Panel to address any duplication when this service is reported with 37201 on the same date by the same physician. Previous notes indicated that ACC submitted a CCP for February 2013 CPT related to 75894, creating a new code for a particular cardiac procedure that is currently reported using that code however; code 75894 was not specifically addressed. At the January 2013 RUC meeting the RUC recommended that 75894 be referred to CPT for revision. CPT code 75894 has not been included in any coding change proposals to date and the specialty society has been requested to submit an action plan indicating why a code change proposal has not been submitted as well as the next steps to address this service. The specialty societies indicated that the utilization for this service will go down after the other coding changes take effect. The Workgroup recommends reviewing this service in 2 years after more utilization data is available (October 2018).

**Introduction of Catheter or Stent - Renal (75984)**

CPT code 75984 was identified in October 2012 via the Code Reported Together 75% More screen, second iteration. The RUC recommended bundling 50392 and 74475, 50393 and 74480, 50394 and 74425, 50398 and 75984 and 50392. All codes were bundled and reviewed in the Genitourinary Catheter Procedures issue at the January 2015 RUC meeting for CPT 2016, except for 75984. CPT code 75984 has not been included in any coding change proposals to date and the specialty society has been requested to submit an action plan indicating why a code change proposal has not been submitted as well as the next steps to address this service. The specialty societies indicated that the
utilization for this service will go down after the other coding changes take effect. The Workgroup recommend reviewing this service in 2 years after more utilization data is available (October 2018).

Reiteration of Screens

*Site of Service (49422)*

AMA Staff reviewed services with anomalous sites of service when compared to Medicare utilization data. One service was identified in which the Medicare data from 2012-2014 indicated that it was performed less than 50% of the time in the inpatient setting, yet include inpatient hospital Evaluation and Management services within the global period. **CPT code 49422 will be placed on the next Level of Interest form for survey in April 2017.**

*High Volume (19 codes)*

AMA Staff assembled a list of all services with total Medicare utilization of 10,000 or more that have increased by at least 100% from 2009 through 2014. The query resulted in the identification of 13 services (00537, 01936, 31623, 64450, 64455, 77435, 77523, 78492, 93299, 93571, 95951, G0102 and G0389). **The Relativity Assessment Workgroup requested action plans for these services for the January 2017 meeting.**

*Negative IWPUT (40 codes)*

At the April 2016 meeting, during new business discussion a RUC member requested that the Relativity Assessment Workgroup review services with low or negative intra-service work per unit of time (IWPUT) as a possible screen. AMA Staff gathered 2014 and 2015e Medicare utilization over 1,000 with negative IWPUT, which resulted in 40 services identified. **The Workgroup briefly discussed this issue and noted that it will continue discussion in April 2017 after the Administrative Subcommittees’ discussion regarding possibly adding a negative IWPUT as a compelling evidence standard.**

XVI. Multi-Specialty Points of Comparison (MPC) Workgroup (Tab 36)

Doctor Verdi DiSesa provided a summary of the report of the MPC Workgroup:

The MPC Workgroup members reviewed proposals from several specialties for codes to be added to or removed from the MPC list. Representatives from the specialty societies attended the meeting to provide clarity and answer questions from workgroup members.

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

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

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XVII. Surgical Global Workgroup (Tab 37)

Doctor Williams, chair of the Surgical Global Workgroup, reviewed the contents of the Workgroup’s conference call report. On August 1, 2016 Doctors Williams and Peter Smith (along with AMA staff) met with CMS staff to outline the RUC’s concerns with the Agency’s proposal on the data collection in the post-operative surgical global. They made it clear that the proposal to create eight new G-codes was extremely burdensome to practicing physicians. Furthermore, they emphasized the impracticality and limited value of collecting data on all 4,400 surgical global codes.

The Workgroup discussed the Agency’s proposal and noted that while it’s important to offer criticisms of the limitations with these G-codes, the Workgroup and the RUC need to be clear that the best solution isn’t to improve these G-codes. Rather, CMS should implement code 99024 and disregard the use of these 8 G-codes.

Following this call, formal comments were submitted to CMS. The Workgroup will meet as needed once the Final Rule is published.

XVIII. Other Business (Tab 38)

No other business was brought up. The meeting was adjourned at 3:37 PM on Saturday, October 8th.