



RVS Update Process

Introduction to the Medicare RBRVS

In 1992, Medicare significantly changed the way it pays for physicians' services. Instead of basing payments on charges, the federal government established a standardized physician payment schedule based on a resource-based relative value scale (RBRVS). In the RBRVS system, payments for services are determined by the resource costs needed to provide them. The cost of providing each service is divided into three components: physician work, practice expense and professional liability insurance. Payments are calculated by multiplying the combined costs of a service by a conversion factor (a monetary amount that is determined by the Centers for Medicare and Medicaid Services). Payments are also adjusted for geographical differences in resource costs.

The physician work component accounts, on average, for 52% of the total relative value for each service. The initial physician work relative values were based on the results of a Harvard University study. The factors used to determine physician work include the time it takes to perform the service; the technical skill and physical effort; the required mental effort and judgment; and stress due to the potential risk to the patient. The physician work relative values are updated each year to account for changes in medical practice. Also, the legislation enacting the RBRVS requires the Centers for Medicare and Medicaid Services (CMS) to review the whole scale at least every five years.

The practice expense component of the RBRVS accounts for an average of 44% of the total relative value for each service. Practice expense relative values were initially based on a formula using average Medicare approved charges from 1991 (the year before the RBRVS was implemented) and the proportion of each specialty's revenues that is attributable to practice expenses. However, in January 1999, CMS began a transition to resource-based practice expense relative values for each CPT code that differs based on the site of service. In 2002, the resource-based practice expenses were fully transitioned.

On January 1, 2000, CMS implemented the resource-based professional liability insurance (PLI) relative value units. The PLI component of the RBRVS accounts for an average of 4% of the total relative value for each service. With this implementation and final transition of the resource-based practice expense relative units on January 1, 2002, all components of the RBRVS are resource-based.



The RVS Updating Process

Annual updates to the physician work relative values are based on recommendations from a committee involving the American Medical Association (AMA) and national medical specialty societies. The AMA/Specialty Society RVS Update Committee (RUC) was formed in 1991 to make recommendations to CMS on the relative values to be assigned to new or revised codes in the *Current Procedural Terminology* (CPT) book. Over 8,600 procedure codes are defined in CPT, and the relative values in the RBRVS were originally developed to correspond to the procedure definitions in CPT.

CPT is maintained by the CPT Editorial Panel. This seventeen-member panel is authorized to revise, update, or modify CPT. Eleven of the seats on the Editorial Panel are nominated by the AMA and the remaining seats are nominated by the Blue Cross and Blue Shield Association, the Health Insurance Association of America, the Centers for Medicare and Medicaid Services and the American Hospital Association. A representative from managed care and two members of the CPT HCPAC (an advisory committee representing non-MD/DO health professionals) serve as part of the eleven AMA appointed seats. The coding system is updated annually (including addition of new codes, deletion of codes that are no longer used, and revisions in procedure descriptions) to ensure that it accurately reflects current medical practice. Changes in CPT necessitate annual updates to the RBRVS for the new and revised codes.

The RUC represents the entire medical profession, with 23 of its 29 members appointed by major national medical specialty societies including those recognized by the American Board of Medical Specialties, those with a large percentage of physicians in patient care, and those that account for high percentages of Medicare expenditures. Three of the specialty seats rotate on a 2-year basis, with two reserved for an internal medicine subspecialty, one for primary care, and one for any other specialty. The RUC Chair, the Co-Chair of the RUC HCPAC Review Board, and representatives of the American Medical Association, American Osteopathic Association, the Chair of the Practice Expense Subcommittee and CPT Editorial Panel hold the remaining six seats.



RVS Update Committee (RUC)

Chair
American Medical Association
CPT Editorial Panel
American Osteopathic Association
Health Care Professionals Advisory Committee
Practice Expense Subcommittee

Anesthesiology	Ophthalmology
Cardiology	Orthopaedic Surgery
Dermatology	Otolaryngology
Emergency Medicine	Pathology
Family Medicine	Pediatrics
Gastroenterology*	Pediatric Surgery*
General Surgery	Plastic Surgery
Geriatric Medicine*	Psychiatry
Internal Medicine	Radiology
Neurology	Thoracic Surgery
Neurosurgery	Urology
Obstetrics/Gynecology	


(* Indicates rotating seat)

Advisory Committee

One physician representative is appointed from each of the 109 specialty societies seated in the AMA House of Delegates to serve on the *Advisory Committee* to the RUC. Specialty societies that are not in the House of Delegates also may be invited to participate in developing relative values for coding changes of particular relevance to their members. Advisory committee members designate an *RVS Committee* for their specialty, which is responsible for generating relative value recommendations using a survey method developed by the RUC. The Advisors attend the RUC meeting and present their societies' recommendations, which the RUC evaluates. Specialties represented on both the RUC and the Advisory Committee are required to appoint different physicians to each committee to distinguish the role of advocate from that of evaluator.

Practice Expense Refinement


The AMA continues to participate and monitor all phases of the refinement of the new practice expense relative values and continues



to advocate that they be based on valid physician practice expense data. Since there is not a single universally accepted cost allocation methodology, it is especially important that CMS base its methodology on actual practice expense data. The decisions reached by CMS have enormous implications for physicians and all their patients, not just those on Medicare. Since many other payment systems use the Medicare RBRVS, the change to resource-based practice expense relative values has broad implications for the entire health care system. Due to the significance of this issue, the RUC established a special subcommittee called the Practice Expense Advisory Committee (PEAC) to monitor this process. The PEAC was charged with the review of direct expense inputs (clinical labor activities, medical supplies, and equipment) used to calculate practice expense relative values, and made code-specific recommendations to the RUC. The RUC then made the final recommendation to CMS. The PEAC specifically reviewed the practice expense inputs of essentially the entire Medicare Fee Schedule by submitting recommendations over for more than 6,500 medical procedures. The composition of the PEAC mirrored the RUC with additional representation from nursing. The PEAC review process was similar to the RUC process, relying on specialty societies to make recommendations that were reviewed by a panel of medical experts and then forwarded to CMS. The PEAC concluded its work in March 2004. The RUC continues to work closely with specialty societies and CMS to maintain the practice expense component of the RBRVS. The RUC has formed a subcommittee that continues to address any existing code refinement issues that arise. This group, the Practice Expense Subcommittee also assists the RUC in its review of practice expense inputs for new and revised codes.

The RUC Health Care Professionals Advisory Committee (HCPAC)

The HCPAC was formed to allow for participation of limited license practitioners and allied health professionals in the RUC process. All of these professionals use CPT to report the services they provide independently to Medicare patients, and they are paid for these services based on the RBRVS physician payment schedule. The 11 organizations seated on the HCPAC represent physician assistants, chiropractors, nurses, occupational therapists, optometrists, physical therapists, podiatrists, psychologists, audiologists, speech pathologists, social workers and registered dietitians. The HCPAC members together with three physician members of the RUC comprise the *RUC HCPAC Review Board*, which is responsible for developing relative value recommendations to CMS for new and revised codes that are reported



principally by non-MD/DO professionals. The Co-Chair of the Review Board also serves as a member of the RUC.

RUC Cycle and Methodology

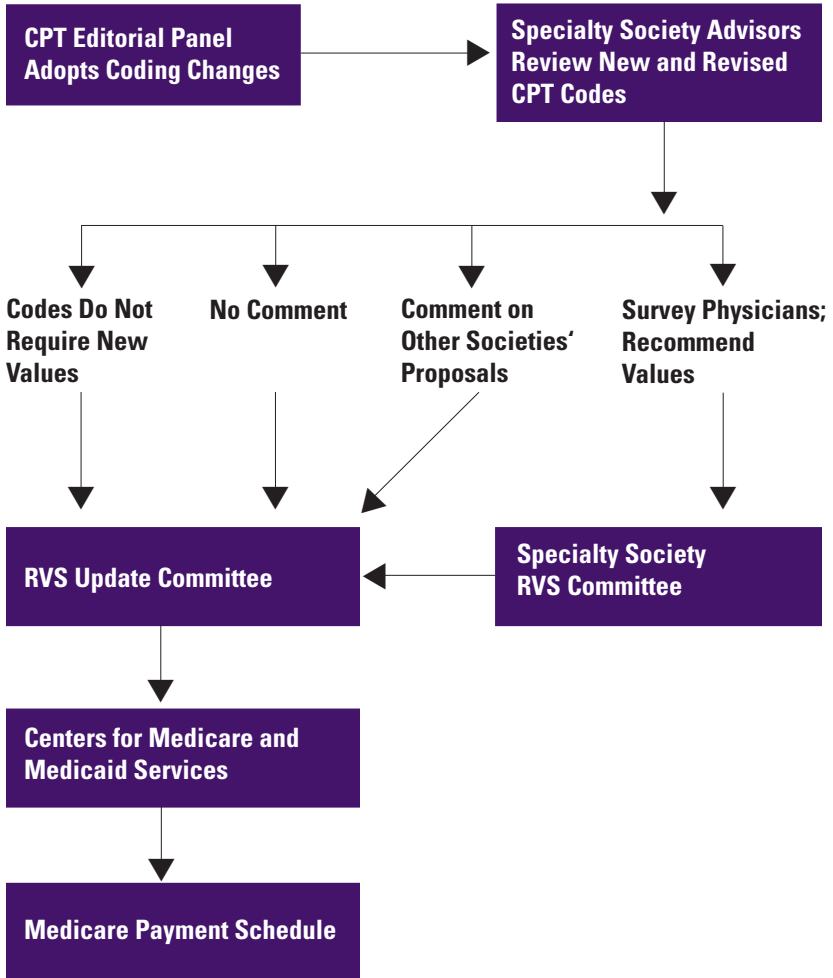
The RUC's annual cycle for developing recommendations is closely coordinated with both the CPT Editorial Panel's schedule for annual code revisions and the CMS schedule for annual updates in the Medicare Payment Schedule. The Editorial Panel meets three times a year to consider coding changes for the next year's edition. The RUC meets after the Editorial Panel meetings to consider relative value codes that are changed or added by the Editorial Panel.

The CPT Editorial Panel's yearly cycle must be completed in February of each year so that the RUC can submit its recommendations to CMS in May. CMS publishes the annual update to the Medicare RVS in the *Federal Register* every year, at about the same time that the AMA publishes the new CPT book for the coming year. The updated CPT codes and relative values go into effect annually on January 1. Due to the close coordination between RUC and CPT and the timely submission of recommendations to CMS, physicians have the benefit of organized medicine's input into relative values for new codes in the same year that the coding changes appear in CPT.

The RUC process for developing relative value recommendations is as follows:

- **Step 1** The CPT Editorial Panel's new or revised codes are transmitted to the RUC staff, who then prepare a "Level of Interest" form. This form summarizes the panel's coding actions.
- **Step 2** Members of the RUC Advisory Committee and specialty society staff review the summary and indicate their societies' level of interest in developing a relative value recommendation. The societies have several options: (1) they can survey their members to obtain data on the amount of work involved in a service and develop recommendations based on the survey results; (2) they can comment in writing on recommendations developed by other societies; (3) in the case of revised codes, they may decide that the coding change does not require action because it does not significantly alter the nature of the service; or (4) they may take no action because the codes are not used by physicians in their specialty.

The RUC Process






- **Step 3** AMA staff distributes survey instruments for the specialty societies. The societies are required to survey at least 30 practicing physicians. The RUC survey instrument asks physicians to use a list of 15 to 25 services as reference points that have been selected by the specialty RVS committee. Physicians receiving the survey are asked to evaluate the work involved in the new or revised code relative to the reference points. The survey data may be augmented by analysis of Medicare claims data and information from other studies of the procedure, such as the Harvard RBRVS study.
- **Step 4** The specialty RVS committees conduct the surveys, review the results, and prepare their recommendations to the RUC. When two or more societies are involved in developing recommendations, the RUC encourages them to coordinate their survey procedures and develop a consensus recommendation. The written recommendations are disseminated to the RUC before the meeting and consist of physician work, time, and practice expense recommendations.
- **Step 5** The specialty Advisors present the recommendations at the RUC meeting. The Advisory Committee members' presentations are followed by a thorough question-and-answer period during which the Advisors must defend every aspect of their proposal(s).
- **Step 6** The RUC may decide to adopt a specialty society's recommendation, refer it back to the specialty society, or modify it before submitting it to CMS. Final recommendations to CMS must be adopted by a two-thirds majority of the RUC members. Recommendations that require additional evaluation by the RUC are referred to a Facilitation Committee.
- **Step 7** The RUC's recommendations are forwarded to CMS in May of each year. CMS Medical Officers and Contractor Medical Directors review the RUC's recommendations.
- **Step 8** The Medicare Physician Payment Schedule, which includes CMS's review of the RUC recommendations, is published late Fall.

Annual RBRVS Updates, 1993-2008

The RUC has submitted approximately 3,500 relative value recommendations for new and revised codes for the 1993-2008 RBRVS annual updates. In addition, the RUC submitted more than 300 recommendations to CMS for carrier priced or non-covered services, including preventive medicine visits. A major reason for evaluating these codes using



the RBRVS system is the widespread adoption of the Medicare payment system by state Medicaid programs and other insurance programs covering pediatric populations. Each year CMS has relied heavily upon these recommendations when establishing interim values for new or revised CPT codes. CMS's acceptance rate for the RUC's recommendations is more than 90% annually.

The RBRVS Five-Year Review Process

In addition to annual updates reflecting changes in CPT, Section 1848(C)2 (B) of the Omnibus Budget Reconciliation Act of 1990 requires CMS to comprehensively review all relative values at least every five years and make any needed adjustments. The success of the RUC's role in the annual updates led CMS to seek assistance from the RUC each of the three Five-Year Review processes. The changes resulting from the first Five-Year review of the RBRVS became effective January 1, 1997. Relative value changes from the second Five-Year Review of the RBRVS were implemented on January 1, 2002. The RUC played a key role in the third Five-Year Review which began in 2005 and concluded with the CMS implementation of new values on January 1, 2007. Because a separate process is ongoing to develop and refine new resource-based practice expense relative values, the Five-Year Review processes have been limited to the physician work relative values.

To allow identification of codes to be included in the initial review, CMS asked the RUC to develop a list of reference services spanning multiple specialties, types of service, and the full range of relative value units. Reference services provide a way of comparing the physician work involved in a service to the work involved in another service, which has an established relative value. For example, a surgical procedure might be identified as misvalued in comparison to another procedure if the first service required two hours more intraoperative work but had a lower relative value than the reference procedure. In response to CMS's request, the RUC developed and has maintained a list of more than 300 services, which could provide standard points of comparison for misvalued services.

Each Five-Year review presents an unprecedented opportunity to improve the accuracy of the physician work component of the RBRVS, as well as a significant challenge to the medical community. All of the codes on the Medicare Physician Payment Schedule were open for public comment as part of each Five-Year review. The initial Five-Year Review included the development of relative values for pediatric




services. The Social Security Amendments Act of 1994 required that RVUs be developed for the full range of pediatric services, as well as determining whether significant variations existed in the work required to furnish similar pediatric patient services.

During the public comment period for the initial Five-Year Review, CMS received nearly 500 letters identifying about 1,100 CPT codes for review. The Carrier Medical Directors, the American Academy of Pediatrics (AAP) and special studies conducted for three specialty societies identified additional codes for review. Following an initial review in late February 1995, CMS referred to the RUC comments on about 3,500 codes.

The second Five-Year Review was initiated in March 2000 when CMS shared comments submitted by 30 specialties on more than 870 codes. The third Five-Year Review was initiated in February 2005 when CMS provided public comments from forty-four specialty societies related to 556 codes. In addition, CMS requested that the RUC review an additional 168 codes, selected principally because they were high volume codes that had not been reviewed since the initial implementation of the RBRVS in 1992.

Methods and Procedures used in the Five-Year Review

The RUC's process for each Five-Year Review involved the same basic methodology as the annual update process, with some important innovations. First, a modified survey instrument was developed. Because the Five-Year Review involved evaluating the work of established codes with established relative values instead of new codes, specialties had to offer evidence that the established relative value was incorrect in addition to showing why the recommended value was correct. To help gather evidence to support such arguments, in addition to comparing the total physician work involved in the services under review to key reference services, survey respondents were asked to provide a detailed comparison of the pre-, intra-, and post-service time involved, to that of key reference services. Survey questions were also added regarding the other elements of work besides time, as well as the extent to which the service has changed over the last five years. If they believed the service had changed over the past five years, they were asked whether: the service represents new technology that has become more familiar; patients requiring the service are more or less complex; and, if the usual site of service has changed.



Another innovation was the collection of information besides that which is developed by the specialty societies to facilitate evaluation of the comments. In addition to the specialty recommendation forms, the AMA assembled data from several sources into a supplemental report on each code. The report included recent trends in claims frequency and site of service; specialties that provide the service; and information from the Harvard RBRVS study on physician time.

The RUC-developed “Guidelines for Compelling Evidence” for the third Five-Year Review. These guidelines were created specifically for this Five-Year Review and were used in the comment process as well as in the review of individual codes to justify a new valuations. The argument for a change was required to meet the compelling evidence standards, including:

- Documentation in the peer-reviewed literature or other reliable data that there have been changes in physician work.
- An anomalous relationship between the code and multiple key reference services.
- Evidence that technology has changed physician work.
- Analysis of other data on time and effort measures.
- Evidence that incorrect assumptions were made in the previous valuation of the service, as documented.

In 2006, the RUC formed the Five-Year Review Identification Workgroup. The purpose of this workgroup is to identify potentially mis-valued services using objective mechanisms for reevaluation during the upcoming Five-Year Review. The Workgroup is also charged with developing and maintaining processes associated with the identification and reconsideration of the value of “new technology” services. The workgroup was established by the RUC following numerous comments from the Medicare Payment Advisory Commission urging CMS to be more diligent in the identification of both potentially over- and under- valued services within the payment schedule for review during the five-year reviews.

Results of the Five Year Review

Year 1995 Five Year Review

In September 1995, the RUC submitted to CMS relative value recommendations for more than 1,000 individual codes for the first Five-Year Review. Of the 1,000 codes evaluated individually, the majority of the recommendations made by the RUC were to maintain the current relative work values. However, the RUC recommended increasing the



value for about 300 services, which addressed long-standing concerns about several major groups of services. The data gathered on the work involved in the evaluation and management, gynecology, and vascular surgery services, for example, supported the commenters' contention that these services were originally valued too low, and the RUC recommended significant increases. These data tended to show that the work involved in the services had increased since the Harvard study was conducted and that the services had been undervalued relative to key reference services since the RBRVS was originally implemented.

The recommendations may be summarized as follows:

- For 296 codes, the RUC recommended that the relative value be increased.
- For 650 codes, the RUC recommended that the current relative value be maintained.
- For 107 codes, the RUC recommended that the relative value be decreased.
- The RUC referred 65 codes to the CPT Editorial Panel to consider coding changes prior to further consideration of the relative value.


CMS's proposed RVU changes were published in a May 1996 *Federal Register*. Overall, CMS accepted nearly 96% of the RUC's recommendations, including 100% acceptance for several specialties. Following a public comment period, final decisions were announced in the November 22, 1996 *Federal Register*.

Year 2000 Five-Year Review

In October 2000, the RUC submitted recommendations on 870 individual CPT codes to CMS. The RUC recommended increases to many surgical services, primarily to address vascular and general surgery procedures that have been historically undervalued. The recommendations may be summarized as follows:

- For 469 codes, the RUC recommended that the relative values be increased.
- For 311 codes, the RUC recommended that the current relative value be maintained.
- For 27 codes, the RUC recommended that the relative values be decreased.
- The RUC referred 63 codes to the CPT Editorial Panel to consider coding changes prior to consideration of the work relative value.

On November 1, 2001, CMS published a Final Rule in the *Federal*



Register with refined work relative value units. CMS accepted 98% of the RUC's recommendations. The relative value changes were implemented on January 1, 2002.

Year 2005 Five-Year Review

In October 2005, February 2006, March 2007 and May 2007 the RUC submitted recommendations on 751 individual CPT codes to CMS. The RUC has recommended improvements to the work RVUs for numerous services including the Evaluation and Management Services, for both stand alone visits and those performed in the post-operative period of surgical procedures. The recommendations may be summarized as follows:

- For 285 codes, the RUC recommended that the relative values be increased.
- For 294 codes, the RUC recommended that the current relative value be maintained.
- For 33 codes, the RUC recommended that the relative values be decreased.
- The RUC referred 139 codes to the CPT Editorial Panel to consider coding changes prior to consideration of the work relative value.

In November 2006, CMS published a Final Rule in the *Federal Register* announcing the agency's final decision regarding these services. CMS accepted 97% of the RUC's recommendations. The relative value changes were implemented on January 1, 2007.

More Information

Visit our website:

<http://www.ama-assn.org/go/rbrvs>

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The Value of the RVS Update Committee and its Process

When Medicare transitioned to a physician payment system based on the Resource-Based Relative Value Scale (RBRVS), the American Medical Association (AMA) anticipated the effects of this change and formulated a multi-specialty committee. This committee, known as the RVS Update Committee (RUC) has made numerous recommendations to CMS that have significantly affected the Medicare physician payment schedule by giving physicians a voice in shaping Medicare relative values. The RUC, in conjunction with the Current Procedural Terminology (CPT) Editorial Panel, has created a process where specialty societies can develop relative value recommendations for new and revised codes. The RUC carefully reviews survey data presented by specialty societies and develops recommendations for consideration by the Centers for Medicare and Medicaid Services (CMS). The RUC has achieved many noteworthy accomplishments including:

- May 30-31, 1992 – The RUC considered the first relative value recommendation from a specialty society. The American College of Obstetricians and Gynecologists, Society of Interventional Radiology, and American College of Radiology presented a work RVU recommendation for CPT code 58345 *Transcervical introduction of fallopian tube catheter for diagnosis and/or re-establishing patency (any method), with or without hysterosalpingography*. CMS accepted this first recommendation. This action was the beginning of a meaningful working relationship with CMS that has resulted in an overall acceptance rate of over 90% for RUC recommendations on more than 3,500 new and revised CPT codes.
- January 1997 – The RUC participated in the first Five-Year Review of the RBRVS, a process dedicated to reviewing the practice expense and work RVUs associated with the entire Medicare Relative Value Scale (RVS). The RUC submitted more than 1,000 CPT codes, including increases to the E/M services. CMS accepted 95% of the RUC's recommendations, which included RVU changes to 400 codes.
- January 2002 – Implementation of the second Five-Year Review of the RBRVS. The RUC submitted recommendations for 870 CPT codes. CMS accepted 98% of the RUC's recommendations.
- March 2004 – The RUC assumed the responsibility of correcting flawed Medicare data by creating a subcommittee of the RUC called the Practice Expense Advisory Committee (PEAC) in November 1998. The PEAC was charged to review the practice expense inputs (clinical staff, medical supplies, equipment) of existing codes. In March 2004, the PEAC had successfully completed its review and refinement of direct practice expense inputs for 6,500 CPT codes.
- January 2007 – Improvements to work relative values for Evaluation and Management services were implemented as a result of the RUC's efforts in the third Five-Year Review of the RBRVS.

The RUC is a unique multi-specialty committee dedicated to making relative value recommendations for new and revised codes as well as periodically updating RVUs to reflect changes in medical practice. Because of this unique structure, the RUC has created the best possible advocate for physician payment, the physician. It is through the work of these dedicated physicians who contribute their time, energy and knowledge that make the RUC process a success that benefits all practicing physicians.

History of RUC Recommendations

Year	Recommendations Submitted (Number of CPT® Codes)	Work Relative Values at or Above RUC Recommendations (After Completion of Refinement Process)
CPT 1993	253	79%
CPT 1994	561	89%
CPT 1995	339	90%
CPT 1996	196	90%
CPT 1997	90	96%
CPT 1998	208	96%
CPT 1999	70	93%
CPT 2000	130	88%
CPT 2001	224	95%
CPT 2002	314	95%
CPT 2003	350	96%
CPT 2004	162	96%
CPT 2005	149	99%
CPT 2006	283	97%
CPT 2007	230	98%
First 5-Year Review (1997)	1118	96%
Second 5-Year Review (2002)	858	98%
Third 5-Year Review (2007)	751	97%