

CHAPTER

3

**Reviewing the work relative
values of physician fee
schedule services**

R E C O M M E N D A T I O N S

3-1 The Secretary should establish a standing panel of experts to help CMS identify overvalued services and to review recommendations from the RUC. The group should include members with expertise in health economics and physician payment, as well as members with clinical expertise. The Congress and the Secretary should ensure that this panel has the resources it needs to collect data and develop evidence.

COMMISSIONER VOTES: YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2

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3-2 The Secretary, in consultation with the expert panel, should initiate the five-year review of services that have experienced substantial changes in length of stay, site of service, volume, practice expense, and other factors that may indicate changes in physician work.

COMMISSIONER VOTES: YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2

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3-3 In consultation with the expert panel, the Secretary should identify new services likely to experience reductions in value. Those services should be referred to the RUC and reviewed in a time period as specified by the Secretary.

COMMISSIONER VOTES: YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2

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3-4 To ensure the validity of the physician fee schedule, the Secretary should review all services periodically.

COMMISSIONER VOTES: YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2

Reviewing the work relative values of physician fee schedule services

Chapter summary

Relative value units (RVUs) are a key element of Medicare's physician fee schedule. They determine how payment rates vary among the 7,000-plus services that physicians furnish to the program's beneficiaries. Periodic review of the RVUs is necessary because the resources needed to perform a service can change over time. When that happens, the value of a service must be changed accordingly; otherwise, Medicare's payments will be too high or too low. For example, if volume grows but total hours worked during a week remain the same, then the work per unit must be going down; unless the service's work RVU is reviewed and revised downward, the service will become increasingly profitable.

Ensuring the accuracy of payments under the physician fee schedule is important for several reasons. First, inaccurate payment rates can distort the market for physician services. Overvalued services may be overprovided because they are more profitable than other services. At the same time, undervalued services may prompt providers to increase volume in order to maintain their overall level of payment. Conversely,

In this chapter

- Measuring physician work
- Importance of review of work relative value units
- The five-year review process
- Improving the five-year review
- Future work

some providers may opt not to furnish undervalued services, which can threaten access to care. Second, over time, if certain types of services become undervalued relative to others, the specialties that perform those services may become less financially attractive, which can affect the supply of physicians. Finally, misvalued services mean that Medicare is paying too much for some services and not enough for others and therefore is not spending taxpayers' and beneficiaries' money wisely.

By law, CMS is required to review the RVUs for the physician work component—which represent the relative time, effort, stress, and skill needed—every five years to determine if any revisions are necessary. This process is known as the “five-year review.” The third five-year review is currently under way.

The Commission evaluated CMS’s five-year review process and determined that changes are necessary because previous five-year reviews led to substantially more increases in RVUs than decreases, even though many services are likely to become overvalued over time. Although we recognize the valuable contribution made by the American Medical Association/ Specialty Society Relative Value Scale Update Committee (RUC), we conclude that CMS’s five-year review process does not do a good job of identifying services that may be overvalued. CMS has relied too heavily on physician specialty societies to identify services that are misvalued and provide supporting evidence.

CMS should play a lead role in identifying misvalued services so overvalued ones are not ignored. CMS could gain the requisite expertise by establishing its own group of experts, separate from the RUC, to help the agency conduct these and other related activities.

Recommendation 3-1

The Secretary should establish a standing panel of experts to help CMS identify overvalued services and to review recommendations from the RUC. The group should include members with expertise in health economics and physician payment, as well as members with clinical expertise. The Congress and the Secretary should ensure that this panel has the resources it needs to collect data and develop evidence.

COMMISSIONER VOTES:
YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2

The expert panel established by the Secretary would not supplant the RUC, but would augment it. The expert panel would assist CMS by using the results of data analyses to identify potentially misvalued services and assess whether those services warrant review by the RUC. Changes in volume, increases in claims for multiple services, and adjustments to practice expense—among other changes—can signal the need to revise valuations of physician work.

The Secretary, in consultation with the expert panel, should initiate the five-year review of services that have experienced substantial changes in length of stay, site of service, volume, practice expense, and other factors that may indicate changes in physician work.

Recommendation 3-2

COMMISSIONER VOTES:
YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2

The work required to perform a new service also may change over time, as physicians become more familiar with the service and more efficient at furnishing it. Scheduled reviews of the RVUs for recently introduced services will help ensure that Medicare’s payment rates change along with the work required.

In consultation with the expert panel, the Secretary should identify new services likely to experience reductions in value. Those services should be referred to the RUC and reviewed in a time period as specified by the Secretary.

Recommendation 3-3

COMMISSIONER VOTES:
YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2

The above recommendations should improve the identification of misvalued services, but inaccuracies could persist within the fee schedule. Periodic review of all services is therefore necessary to maintain the robustness of the payment system.

To ensure the validity of the physician fee schedule, the Secretary should review all services periodically.

Recommendation 3-4

COMMISSIONER VOTES:
YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2

We recognize that these recommendations will increase demands on CMS and urge the Congress to provide the agency with the financial resources and administrative flexibility needed to undertake them.

The recommendations in this chapter represent the first step in the Commission’s work on pricing of services in the physician fee schedule. In future reports, we will consider other elements of the fee schedule, including adjustment of payments for input prices that vary geographically, the boundaries of payment localities, methods for determining practice expense RVUs, and the fee schedule’s unit of payment. In addition, we are concerned about disparities in remuneration between primary and specialty care, and the implications those disparities have for the future of the physician workforce—a workforce that will be required to meet the chronic care and other needs of Medicare beneficiaries. The Commission will also consider opportunities to improve the value of services Medicare purchases, with a goal of identifying cost-effective services. ■

Background

In 1992, the Health Care Financing Administration (HCFA) (now the Centers for Medicare & Medicaid or CMS) implemented the Medicare physician fee schedule. The Congress intended the new resource-based fee schedule to remedy some of the problems inherent in the old charge-based payment system, which undervalued evaluation and management (E&M) services as a group and overvalued procedures. Such inaccurate valuations were widely perceived to have altered physician decisions about what services to provide, where to practice, and whether to specialize (PPRC 1987).

Under the resource-based physician fee schedule, each service is assigned values reflecting the relative resources needed to provide the service, with the physician work component—representing the time, effort, skill, stress, and risk of performing the service—accounting, on average, for slightly more than half of the payment. Subsequent analyses by the Physician Payment Review Commission (PPRC) and others showed that, under the physician fee schedule, payment rates for E&M services increased relative to other services, such as surgery and other procedural services (PPRC 1997, Iglehart 2002).

Nevertheless, there are signs that some physician services continue to be misvalued. In recent years, aggregate payments for certain types of services have grown at widely disparate rates, with growth in payments for imaging and minor procedures outpacing that for visits and major procedures (MedPAC 2005). Volume growth differs across services for several reasons, including variability in the extent to which demand can be induced and advances in technology that expand access and can improve patient outcomes. Imaging services, for example, can improve physicians' ability to diagnose and treat disease. The Commission and others have voiced concerns, however, that differential volume growth is due in part to differences in the profitability of services (Ginsburg and Grossman 2005).

To the extent that the sustainable growth rate (SGR) limits growth in aggregate physician spending, differences in the rate of volume increases across services means that certain types of services—such as imaging—are capturing a larger portion of Medicare physician spending, at the expense of other services.¹ The Commission has expressed particular concern about primary care services, which have been found to be capturing a smaller portion of Medicare physician spending even though the overall

relative value of E&M services has increased. An Urban Institute analysis of changes in the relative values assigned to services during the first 10 years' experience with the physician fee schedule and how those changes interact with growth in the volume of services sheds light on this dynamic. For example, in 1992, the first year of the resource-based physician fee schedule, E&M services accounted for half of total relative-value-weighted physician volume, while imaging services accounted for 12 percent (Table 3-1, p. 138) (Maxwell et al. 2005).² Due to overall increases in the relative values of E&M services between 1992 and 2002, those services would have been expected to rise 1.6 percentage points to account for almost 52 percent of relative-value-weighted volume by 2002. Meanwhile, overall reductions in the relative value of imaging services would have caused those services' share of weighted volume to fall by 2.4 percentage points, from 12 percent of total relative-value-weighted volume to 9.6 percent.

But growth over the 10-year period in the number of imaging services more than made up for their loss in relative value, so those services now account for 14 percent of total relative-value-weighted volume. At the same time, the number and intensity of E&M services furnished grew slowly relative to some other types of services, thereby nullifying the overall gains in the relative value of E&M services. Consequently, as a share of total spending, Medicare payments for E&M services fell between 2002 and 2004 (Figure 3-1, p. 139). In 2002, E&M services accounted for 49.7 percent of spending under the physician fee schedule. In 2003, the E&M share was 49.2 percent, and in 2004 it dropped to 46.5 percent.

The results of CMS's reviews of the physician work relative values in the fee schedule raise additional concerns that some physician services are misvalued. CMS is required by law to review and, if necessary, refine the fee schedule's relative values at least every five years, a process that is known as the five-year review.³ The first two five-year reviews, completed in 1996 and 2001, led to substantially more increases than decreases in the relative values of services. It appears that services perceived to be undervalued are far more likely to be reviewed, while potentially overvalued services remain misvalued.

This phenomenon can decrease payment rates for other services. By law, if changes to the work relative values resulting from a five-year review would cause total physician fee schedule payments to change by more than \$20 million, then a budget neutrality requirement

**TABLE
3-1**

Effect of change in relative values and volume on distribution of total relative values, 1992-2002

Type of service	Share of RVU-weighted volume in 1992	Percentage change in total relative value	Percentage change in volume	Percentage change in volume and total relative value	Share of RVU-weighted volume in 2002
E&M	50%	1.6%	-1.6%	0.0%	50%
Imaging	12	-2.4	4.6	2.2	14
Major procedures	13	-0.3	-2.4	-2.7	10
Other procedures	23	0.2	-0.2	0.0	23
Tests	3	0.9	-0.3	0.6	4

Note: E&M (evaluation and management), RVU (relative value unit). Total relative value includes the components of physician work, practice expense, and professional liability insurance. Columns may not add to 100 due to rounding.

Source: Urban Institute analysis of CMS physician/supplier files and American Medical Association/Specialty Society Relative Value Scale Update Committee Review files.

applies. When more work relative values are increased than decreased—as was the case in previous five-year reviews—the budget neutrality requirement results in the passive devaluation of services whose relative values were not increased.⁴

Misvalued services can distort the market for physician services (as well as for other health care services that physicians order, such as hospital services). If relative values are not set in proportion to underlying resource costs, some physician decisions may be inappropriately influenced by financial considerations. Some overvalued services may be overprovided because they are more profitable than other services. Services can become increasingly profitable if, for example, the work per unit declines because volume grows but total hours worked during a week remain the same. At the same time, undervalued services may prompt providers to increase volume in order to maintain their overall level of payment. Conversely, some providers may opt not to furnish undervalued services, which can threaten access to care. If certain types of services become undervalued relative to other types of services, the specialties that perform those services may become less financially attractive. Over time, that can affect the supply of physicians by influencing physician decisions about whether and how to specialize. Finally, misvalued services mean that Medicare is paying too much for some services and not enough for others, and therefore is not spending taxpayers' money wisely.

In this chapter, we discuss the importance of periodic review of the relative values in the physician fee schedule and examine the current five-year review process.

Although we recognize the valuable contribution made by the American Medical Association/Specialty Society Relative Value Scale Update Committee (RUC) and support the RUC's continued involvement, we conclude that the process does not do a good job of identifying services that may be overvalued. CMS relies too heavily on physician specialty societies to identify services that are misvalued and to provide supporting evidence. The recommendations in this chapter should help remedy this problem.

Measuring physician work

Since January 1, 1992, Medicare has paid for physicians' services using a physician fee schedule. Under the fee schedule, payment for each service reflects the relative resources needed to provide it. Each service's total relative value is the sum of three components corresponding to the main inputs required to produce physicians' services:

- physician work—the time, mental effort, technical skill and effort, psychological stress, and risk of performing the service;
- practice expense—the associated costs incurred for nonphysician staff, equipment, supplies, office space, and other inputs; and
- professional liability insurance.

The three components are represented by three relative value units (RVUs) assigned to each service code. On

average, the physician work component accounts for over half of payments under the fee schedule.

The work RVUs were originally developed by a research team at the Harvard School of Public Health in a cooperative agreement with the Health Care Financing Administration. Hundreds of physicians were given a set of vignettes describing typical clinical scenarios for reference services and asked to assign work values to other vignettes relative to the reference set. Small groups of physicians reviewed and revised results from these surveys based on comparisons with the results from other groups and additional analyses.⁵ The resulting resource-based Relative Value Scale (RBRVS) was implemented in 1992. The RBRVS changes each year as new codes are added or established codes are redefined (which may change the amount of work required to perform the service).

Medicare adopted the RBRVS to remedy some of the problems inherent in the old charge-based payment system. That system was criticized as being inflationary and administratively complex. Further, in part because E&M services as a group were believed to be undervalued and procedures overvalued relative to the resources needed to provide them, many believe that the charge-based payment system created inappropriate incentives for the use of medical services, and may have influenced physicians' decisions on where to locate and what to specialize in (PPRC 1987).

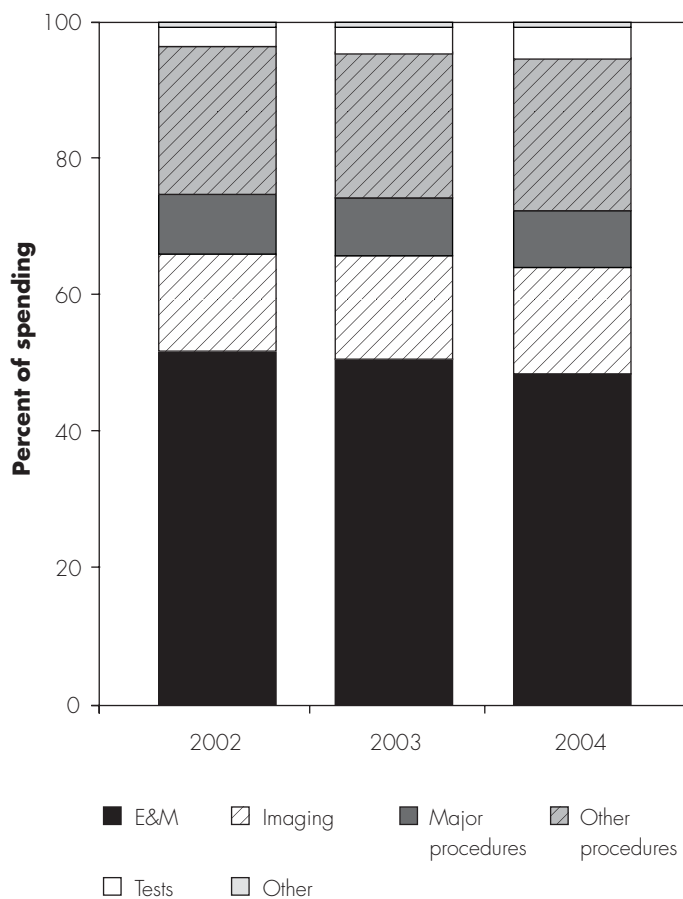
Importance of review of work relative value units

Periodic review of the RVUs is important because the resources needed to perform a service can change over time. In an analysis of the first five-year review, Health Economics Research identified seven factors that can increase or decrease the amount of time, effort, stress, and skill required (McCall et al. 1999). These factors are:

- **Learning by doing**—results in efficiency improvements that reduce the amount of work involved in performing a service. As early performers of a service become more familiar with a procedure, they can complete it more quickly and with less mental effort, skill, and risk. The service's work value, therefore, should decline.
- **Technology diffusion**—affects average procedure time and intensity. Changes to average time and reported

FIGURE 3-1

Spending for physician services, by type of service, 2002-2004



Note: E&M (evaluation and management). E&M services include visits to specialists, such as pathologists, psychiatrists, and ophthalmologists.

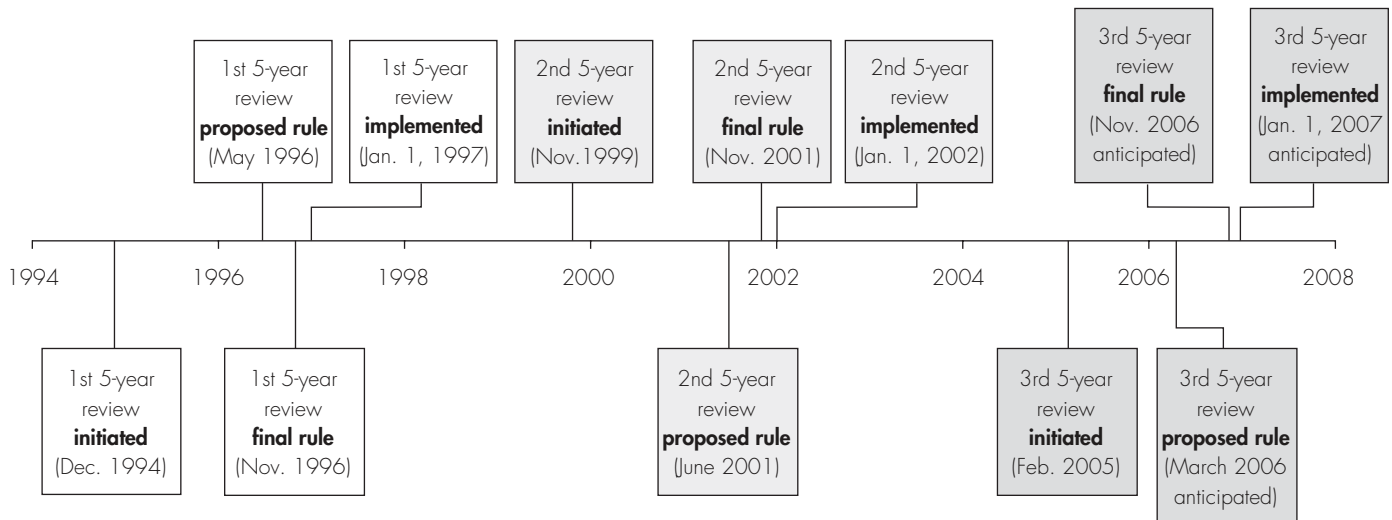
Source: MedPAC analysis of claims data for 100 percent of Medicare beneficiaries from CMS.

work will depend on how familiar providers are with a technology. Initially, average time and intensity may increase, as a growing number of physicians first begin to perform a service. Later, average time and intensity should decrease.

- **Technology substitution**—can reduce the time required to accomplish a task and raise the productivity and hourly wage of workers as physician work is replaced by machines. Computerized interpretation of diagnostic tests is an example of this phenomenon.
- **Allied health personnel substitution**—should reduce the physician time required to perform a service. As the physician's time may then be devoted to more

**FIGURE
3-2**

Five-year review schedule



Note: CMS's proposed changes are published in a proposed rule. The American Medical Association/Specialty Society Relative Value Scale Update Committee's recommendations inform these proposals.

complicated tasks, however, personnel substitution can sometimes have an offsetting effect on physician work by raising the average intensity per physician minute.

- **Re-engineering**—affects both the level and intensity of physician work by changing the way patient care is managed. When re-engineering changes the site of care, such as when patients spend less postoperative time in the intensive care unit, physician work can increase or decrease.
- **Changes in patient severity**—can increase or decrease physician work. A drop in average severity may reduce physician work, such as when the risk of a procedure declines, making it an option for patients who are less severely ill. Patient severity can also rise over time, which could increase physician work.
- **Increased documentation requirements**—can boost the work required to perform a service.

Thus, physician work can increase or decrease over time. When the work required to produce a service changes, CMS should adjust the the value of the service accordingly. Otherwise, Medicare's payments will be too high or too low, relative to the resources need to produce it.

The five-year review process

To keep the fee schedule up to date, CMS is required by law to review and, if necessary, refine the fee schedule's relative values at least every five years. This process is known as the five-year review. CMS initiated the first five-year review in 1994 and completed it in 1996 (Figure 3-2). The third five-year review is now under way. For this review, as with previous five-year reviews, CMS is assessing only the work relative values.⁶

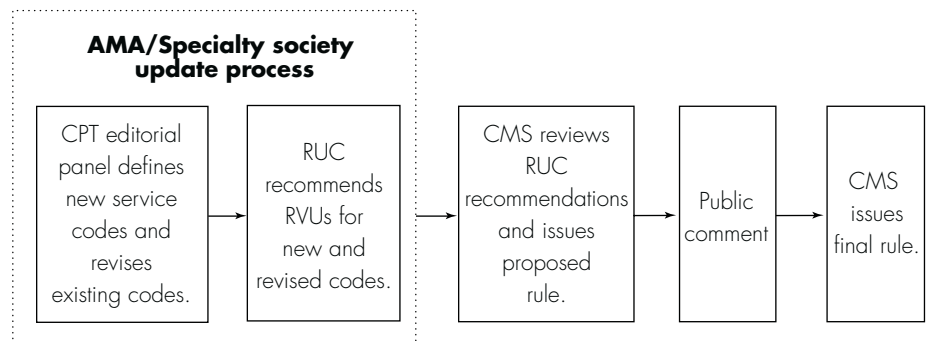
In conducting its five-year reviews, CMS relies heavily on the assistance of a private-sector group called the RUC. The RUC was formed in 1991 by the American Medical Association (AMA) and physician specialty societies to make annual recommendations to CMS on the relative values for new services that are added to the physician fee schedule, as well as for services that have been redefined by the AMA's Current Procedural Terminology (CPT) Editorial Panel (Figure 3-3).

Every five years, the RUC also reviews and makes recommendations to CMS on the relative values of existing services as part of the five-year review. CMS initiates the five-year review process by requesting public

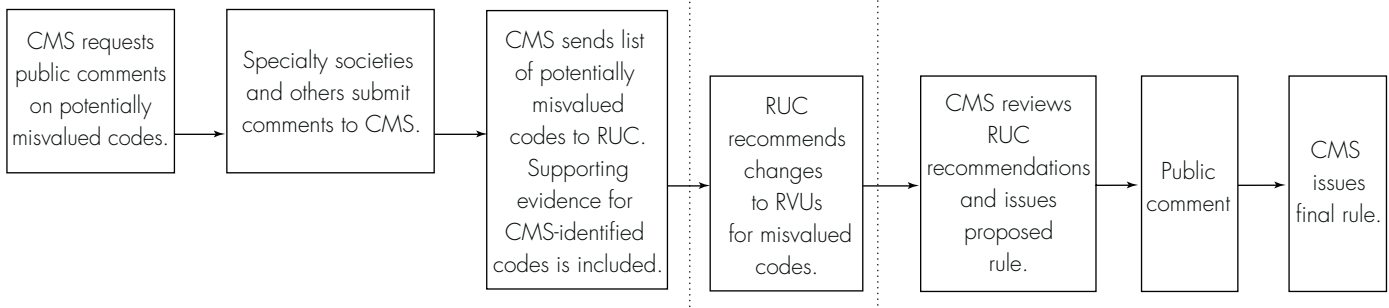
**FIGURE
3-3**

Current RVU annual and five-year review process

Annual review



Five-year review



Note: RVU (relative value unit), AMA (American Medical Association), CPT (Current Procedural Terminology), RUC (Relative Value Scale Update Committee).

comments on potentially misvalued work RVUs. All of the codes on the fee schedule are open for comment. Most comments are submitted by physician specialty societies. In addition, CMS staff may identify codes that they believe need review. The codes are then forwarded to the RUC. RUC staff develop survey instruments for specialty societies that are interested in formulating relative value recommendations for the codes in question. Specialty societies field the surveys and use the findings to propose changes in the relative values of services to the RUC.

The RUC then assesses the evidence. The RUC may decide to adopt a specialty society’s recommendation, refer it back to the society, or modify it. Final recommendations must be adopted by a two-thirds majority of RUC members.

The RUC submits its recommendations to CMS. After reviewing the recommendations, the agency proposes interim RVUs for services, which are published in the *Federal Register*. As discussed below, the agency generally accepts the relative value revisions recommended by the RUC. Before issuing a final rule, CMS considers public comments on its proposed rule. When public comments disagree with CMS’s proposed RVUs, CMS may convene a refinement panel to consider the work RVUs for a particular service or related services. The panel consists of representatives of the commenting specialty that performs the service, related specialties, primary care specialties, and carrier medical directors. The commenting specialty presents its rationale to the panel, panel members can ask questions, and then the panel members complete scoring sheets indicating the service valuation. CMS uses

statistical methods to examine the inter-rater variation and estimate the panel's mean rating. If the refinement panel's mean rating for a service differs considerably from the proposed RVU, CMS usually adopts the refinement panel's rating.⁷

Improving the five-year review

There is no reason to believe that physician services are more likely to become undervalued over time than overvalued. Yet previous five-year reviews led to substantially more increases in RVUs than decreases. During the first five-year review, the RUC recommended increases in the relative values for 296 codes, no change for 650 codes, and decreases for 107 codes (AMA 2005). The second five-year review produced an even more lopsided outcome, with the RUC recommending increases in the relative values for 469 codes, no change for 311 codes, and decreases for 27 codes. CMS makes the final decisions regarding relative value revisions. In the two previous five-year reviews, the agency accepted more than 90 percent of the RUC's recommendations (HCFA 2001, HCFA 1996).

The RUC has recommended more increases than decreases in large part because it has been much more likely to review undervalued services than overvalued ones. Most of the services examined by the RUC during the five-year review process are identified in public comments to CMS from specialty societies. The vast majority of these comments have concerned codes that societies believe are undervalued. During the second five-year review, CMS (then the Health Care Financing Administration) received comments on about 900 codes; the relative values for all but a handful were considered too low (HCFA 2001). The same is true of the 542 codes submitted to CMS for the current review. This outcome is not surprising, given that the specialty societies and their members have a financial stake in the process. Indeed, the chair of the RUC has stated that physician specialty societies "are not in a position" to nominate potentially overvalued codes (Rich 2005).

During the first five-year review, CMS identified codes it considered misvalued and asked the RUC to evaluate them. During the second five-year review, however, the agency did not identify any codes for RUC review. And for the current five-year review, CMS submitted codes to the RUC but did not indicate whether it thought the submitted

codes were over- or undervalued, nor did the agency provide evidence for the RUC to consider.⁸

The integrity of the physician fee schedule relies on the accuracy of its relative values. As mentioned previously, volume growth and the nation's supply of generalists and specialists may also be influenced by the accuracy of the relative values. Given the importance of accurate payment, the Commission has concluded that CMS's process for reviewing the relative values of existing codes must be improved. The RUC and the specialty societies play an important role, which should continue, but CMS's responsibility to identify potentially misvalued services, especially overvalued ones, is central. To improve the identification of misvalued services, the agency needs more resources to collect and analyze data.

The Commission recommends that CMS reduce its reliance on physician specialty societies to identify physician services that merit review and to provide supporting evidence. The Secretary should establish an expert panel to help CMS identify misvalued services and collect data to establish supporting evidence for the RUC to consider. Further, the Commission recommends that the Secretary implement reviews of services based on analyses of Medicare data, institute automatic reviews of work relative values for selected recently introduced services after a specified period, and establish a process by which all services are reviewed periodically. These recommendations are not intended to supplant the RUC but rather to augment it. The changes should help reduce the number of physician fee schedule services that are misvalued, thereby making payments more accurate.

We recognize that these recommendations will increase demands on CMS. As the recommendations are intended to improve the accuracy of Medicare's payments and achieve better value for Medicare spending, the Congress should provide CMS with the financial resources and administrative flexibility to undertake them.

In addition to the issues addressed by the Commission's recommendations, the representation of certain specialties on the RUC is also a concern. Twenty-three of the RUC's 29 members are appointed by major national medical specialty societies (Figure 3-4) (AMA 2005). (Three seats rotate on a two-year basis, with two reserved for an internal medicine subspecialty and one for any other specialty.) Originally, the specialty criteria for a permanent seat on the RUC were that the specialty: was a member of the American Board of Medical Specialties; comprised

**FIGURE
3-4**

Composition of the AMA/Specialty Society Relative Value Scale Update Committee

Chair	One representative each from:			
AMA	Anesthesiology	Internal medicine	Orthopedic surgery	Pulmonary medicine*
CPT Editorial Panel	Cardiology	Neurology	Otolaryngology	Radiology
American Osteopathic Association	Dermatology	Neurosurgery	Pathology	Spine care*
Health Care Professionals Advisory Committee	Emergency medicine	Obstetrics/Gynecology	Pediatrics	Thoracic surgery
Practice Expense Advisory Committee	Family medicine	Oncology*	Plastic surgery	Urology
	General surgery	Ophthalmology	Psychiatry	

Note: AMA (American Medical Association), CPT (Current Procedural Terminology).
*Indicates a rotating seat.

Source: American Medical Association 2005.

1 percent of physicians in practice; comprised 1 percent of Medicare physician expenditures; had Medicare revenue that was at least 10 percent of the specialty’s mean practice revenue; or was not meaningfully represented by an umbrella organization, as determined by the RUC. Although the RUC continues to use the criteria to evaluate petitions for new seats, current members are not subject to removal based on the criteria (Smith 2005).

Some physician groups are concerned that physicians who furnish primary care services are not represented adequately on the RUC (Stubbs 2005). Representation on a panel such as the RUC can be defined by the percentage of total E&M services furnished by a specialty, or by the proportion of total Medicare physician expenditures, or in other ways. At this time, the Commission does not have a recommendation on how RUC membership should be defined. Rather, the Commission calls on CMS to request that the medical community propose changes in the composition of the RUC. The Commission is aware that the AMA and physician specialty societies are having ongoing conversations about the RUC’s composition. We will continue to monitor the issue.

Assisting CMS with the valuation of services

As currently designed, the five-year review process does not do a good job of identifying services that may be overvalued. CMS relies too heavily on physician specialty societies to identify services that merit review and provide evidence in support of increasing or decreasing the relative values of services under review. Although the RUC provides valuable expertise, the review process would benefit if CMS had an additional means of identifying misvalued services and if supporting evidence were collected and analyzed not only by specialty societies but also by experts who were less invested financially in the outcome.

RECOMMENDATION 3 - 1

The Secretary should establish a standing panel of experts to help CMS identify overvalued services and to review recommendations from the RUC. The group should include members with expertise in health economics and physician payment, as well as members with clinical expertise. The Congress and the Secretary should ensure that this panel has the resources it needs to collect data and develop evidence.

RATIONALE 3 - 1

Given the tendency of the current process to identify and correct undervalued services, CMS should play a lead role in identifying overvalued services. CMS could gain the requisite expertise by establishing its own group of experts, separate from the RUC, to help the agency conduct these and other related activities.

IMPLICATIONS 3 - 1

Spending

- This recommendation would not affect federal benefit spending relative to current law.

Beneficiary and provider

- Any effects on beneficiaries and providers are likely to be small. This recommendation is expected to make payments under the physician fee schedule more accurate and, therefore, could have redistributive effects on providers.

Currently, after CMS has published its proposed changes to work RVUs for existing services, the agency may convene ad hoc refinement panels to evaluate public comments. The refinement panels include carrier medical directors and physicians from the specialty most frequently furnishing the service, related specialties, and primary care. We propose that this refinement panel be reconfigured to play a regular role in the service valuation process, particularly at the beginning of the process when CMS is seeking to identify misvalued services.

The expert panel should not supplant the RUC, which provides a valuable service to CMS. Rather, the panel should help improve the identification of misvalued services, especially overvalued ones, for RUC review (Figure 3-5). The panel should be involved at the outset of the five-year review process, before the RUC begins its work. The panel would review the codes that CMS's data analyses have identified as potentially misvalued and consider which services warrant further consideration by the RUC (see Recommendation 3-3, p. 147). The panel would then develop additional evidence supporting the correction of misvalued services, for example, by conducting its own provider surveys. This supporting evidence is likely to carry more weight with the RUC than an unannotated list of codes (such as that forwarded by CMS to the RUC during the current five-year review). Later in the five-year review process, CMS would use the expert panel to help evaluate RUC recommendations.

To ensure that the panel has sufficient expertise in considering whether services are misvalued, it should include representatives from CMS's network of carrier medical directors, experts in medical economics and technology diffusion, private payer plan representatives, and a mix of physicians, particularly ones that are not directly affected by changes to the Medicare physician fee schedule (for example, physicians who are employed by managed care organizations or academic medical centers). Carrier medical directors have a wealth of knowledge about current medical practice and local coverage decisions that could assist the panel in its review activities. Experts in medical economics will help CMS decide whether to adjust RVUs to account for any economies of scale that accompany volume growth, while experts in technology diffusion will help CMS address the efficiencies that accompany the learning-by-doing associated with new services. Private payers bring the feedback they receive from the marketplace and may provide evidence of distortions in payment rates for physician services.

Although this recommendation would not affect federal benefit spending relative to current law, the Congress may need to appropriate additional program funding for CMS to establish, manage, and staff the expert panel. In addition, the panel would need adequate resources to collect and analyze data.

Improving the identification of misvalued services

Analyses of Medicare data may provide the needed information to support the agency's claim that certain codes are overvalued. In addition, the analyses are likely to show that some of the services needing review are significant contributors to recent growth in Medicare physician spending.

RECOMMENDATION 3 - 2

The Secretary, in consultation with the expert panel, should initiate the five-year review of services that have experienced substantial changes in length of stay, site of service, volume, practice expense, and other factors that may indicate changes in physician work.

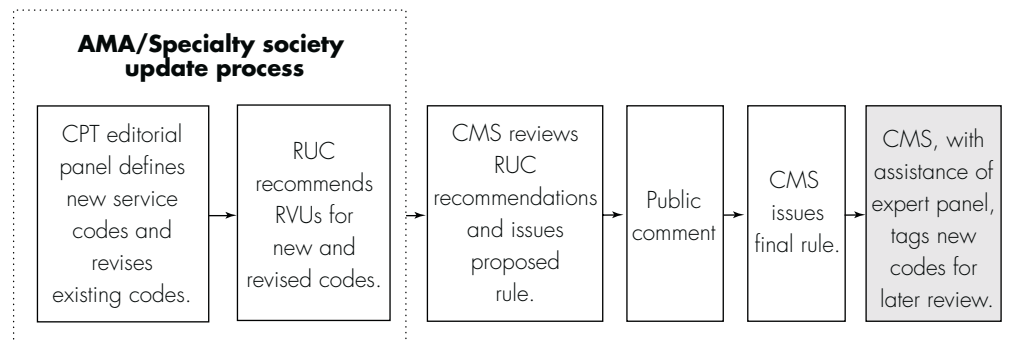
RATIONALE 3 - 2

Reviews of services experiencing substantial change may improve the identification of overvalued services.

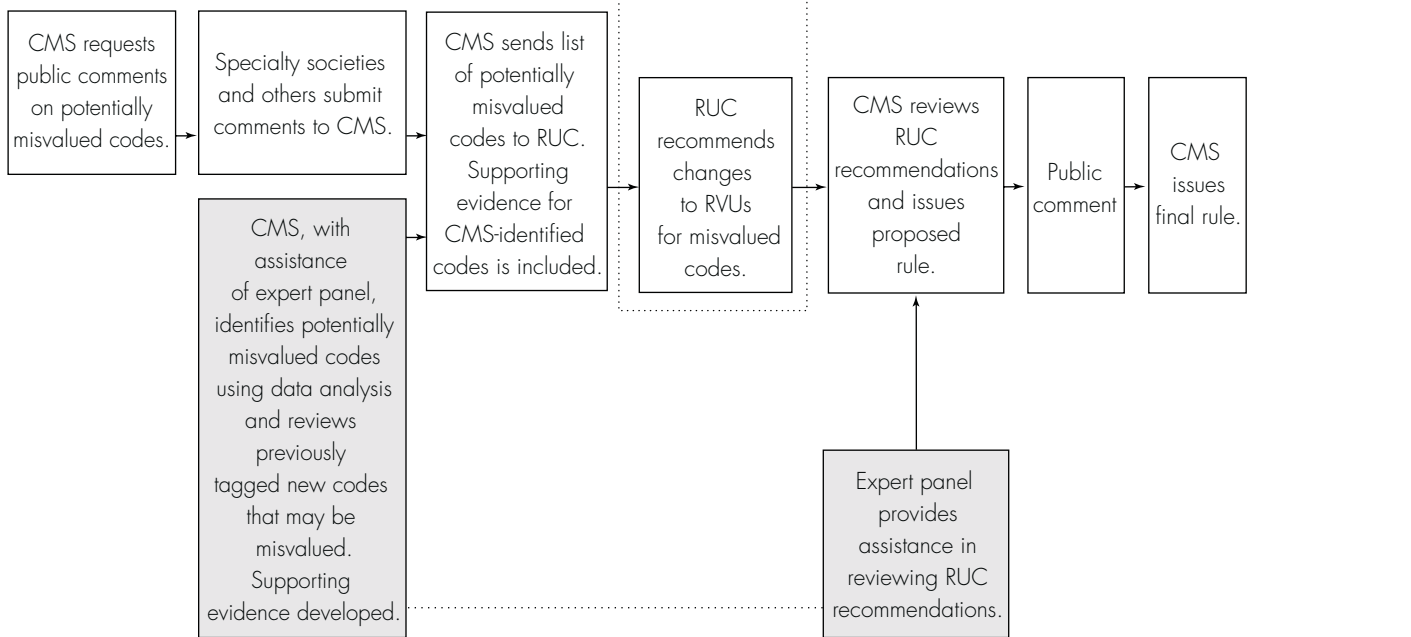
FIGURE 3-5

RVU annual and five-year review process, current and recommended

Annual review



Five-year review



Note: RVU (relative value unit), AMA (American Medical Association), CPT (Current Procedural Terminology), RUC (Relative Value Scale Update Committee). MedPAC's recommended changes are shown in gray boxes.

IMPLICATIONS 3-2

Spending

- Given budget neutral implementation, this recommendation will not affect program spending.

Beneficiary and provider

- Any effects on beneficiaries are likely to be small. This recommendation is expected to make payments under the physician fee schedule more accurate and thus could have redistributive effects on providers.

Changes in volume, increases in claims for multiple services, and adjustments to practice expense, among other changes, can signal the need to revise valuations of physician work. An expert panel established by the Secretary (see Recommendation 3-1, p. 143) would assist CMS by using the results of data analyses to identify potentially misvalued services and assess whether those services warrant review by the RUC (Figure 3-5).

Changes in volume may suggest that physician work has changed

Over time, some services that experience volume growth may become overvalued. Requirements for physician work should fall as proficiency improves through learning by doing; nonphysician clinical staff time may fall as well. (In addition, volume growth should lead to economies of scale in the use of fixed assets, such as equipment and office space, which should be reflected in revised practice expense RVUs.) When volume grows but total hours worked during a week remain the same, then the work per unit must be going down; unless the service's work RVU is reviewed and revised downward, the service will become increasingly profitable. As discussed previously, wide variation in the profitability of services can create perverse incentives that can distort the market for physician services.

Every year, the Commission analyzes growth in the volume of physician services when assessing the adequacy of Medicare's payments for those services. These analyses have consistently shown that volume growth is highest for certain types of services, especially imaging and tests.

CMS should routinely conduct analyses similar to the Commission's to identify services with unusually high volume growth. One approach is for CMS to compare each service with similar services, flagging those with unexpectedly higher-than-average volume growth. For instance, if the volume growth for an MRI service exceeds that for all imaging services, CMS would flag the MRI service as needing review during either the next five-year review or an interim review. The service would then be forwarded to the RUC for review, along with the expert panel's supporting evidence. Specialty societies and other interested parties would have a chance to submit their own evidence to the RUC supporting a specific RVU for the service in question. CMS could also compare volume growth across broad categories of services—imaging, tests, E&M, major procedures, and other procedures—to determine if certain categories were experiencing higher volume growth than others and whether that volume growth warranted review. These comparisons of volume growth would expand on analyses presented in CMS's letter to MedPAC regarding the preliminary estimate of the physician update for 2006 (Kuhn 2005).

Increased claims for multiple services suggest that physician work may have changed

Generally, RVUs are determined for each service individually, under the assumption that services are furnished independently. But if physicians frequently provide multiple services at the same time, efficiencies often accrue. Therefore, increased frequency of claims for multiple services furnished by a single physician may provide an indication that the RVUs for certain services are too high.

The Commission has previously commented on this issue. In March 2005, we recommended that the Secretary should improve Medicare's coding edits that detect unbundled diagnostic imaging services and reduce the technical component payment for multiple imaging services performed on contiguous body parts (MedPAC 2005). The technical component includes practice expense but not physician work. On November 2, 2005, CMS announced that it will implement this recommendation over a two-year transition period. In 2006, the agency will reduce by 25 percent the technical component payment for second and subsequent imaging services performed on contiguous body parts. Starting in 2007, the reduction will be 50 percent.

In addition to a payment adjustment for practice expense, changes to payments for physician work when multiple services are provided together may be appropriate. The time that physicians spend furnishing services is one measure of physician work, and some time savings are likely when physicians furnish multiple services together instead of separately.

Other indicators of changes in physician work

A large increase in the practice expense component of physician payment—during future five-year reviews, for example—signals the need to evaluate work RVUs, because such changes may reflect substitution of nonphysician clinical staff or other inputs for work previously done by physicians. For example, use of digital storage of radiographic and other images may increase practice expenses, while simultaneously reducing physician work by shortening the time physicians need to interpret those images (Kieffer and Drew 2000).

Additional analyses of Medicare data would flag services for review based on changes in site of service, the mix of specialties performing the service, and length of stay (an indication that pre- and postsurgical periods may have changed since the service was valued).

Ensuring accurate payment for recently introduced services

When a new service is added to the physician fee schedule, it may be assigned a relatively high work value because of the additional time, mental effort, technical skill and effort, psychological stress, and risk that are often required to perform that service. Over time, the work required for certain services would be expected to decline as physicians become more familiar with the service and more efficient in furnishing it. The Commission is aware that the RUC is considering taking a more proactive role in the review of recently introduced services. Yet the experience to date is that the relative values of these services generally remain valued at their initial high levels. Indeed, an Urban Institute analysis of changes in the relative values assigned to non-E&M services introduced to the physician fee schedule between 1992 and 1997 found that the work relative values of new services actually increased on average 0.5 percent each year between 1997 and 2002 (Maxwell et al. 2005).

RECOMMENDATION 3-3

In consultation with the expert panel, the Secretary should identify new services likely to experience reductions in value. Those services should be referred to the RUC and reviewed in a time period as specified by the Secretary.

RATIONALE 3-3

The work required to perform a new service often changes as physicians gain familiarity with it. Automatic reviews of the RVUs for selected recently introduced services will help ensure that Medicare's payment rates change along with the work required.

IMPLICATIONS 3-3

Spending

- Given budget neutral implementation, this recommendation will have no effect on program spending.

Beneficiary and provider

- Any effects on beneficiaries are likely to be small. This recommendation is expected to make payments under the physician fee schedule more accurate and thus could have redistributive effects on providers.

The work required to furnish many—although not all—new services can be expected to change over time. CMS, with the assistance of the expert panel, should conduct analyses to determine if changes in work can

be expected in the early years after a service is first introduced. Such research could inform not only the Secretary's decision about what an appropriate value for a particular service should be but also when reviews should occur. The Secretary should identify services that are likely to experience work changes and schedule a future review for them (Figure 3-5, p. 145). At the appropriate time, the RUC should review the services identified by the Secretary and should consider the expert panel's supporting evidence for that change. Reviews should not be postponed until an upcoming five-year review but should occur on an as-needed basis. As is the case with five-year reviews, specialty societies and other interested parties would have a chance to submit their own evidence to the RUC supporting a specific RVU for a service scheduled for review.

As part of this process, CMS should also assess established services for which the newly introduced services are substitutes. The use of coronary angioplasty instead of coronary artery bypass grafts is an example of such substitution. As the use of newly introduced services grows, the types of patients using established services could change. If the severity of patients receiving established services increases or decreases, the resources needed to furnish those services could change as well.

Validating relative values

Since the fee schedule was first implemented, the RUC has reviewed the relative values of most of the services furnished to beneficiaries. However, that review has not occurred for about one-sixth of the RVU volume. Consequently, the original valuation of those services, established more than 15 years ago, may no longer reflect current medical practice. The improvements we recommend above should help CMS identify and correct a higher proportion of misvalued services, but inaccuracies could remain in the fee schedule. Some may persist because, due to low volume, the services have not been identified for review. Other inaccuracies could remain because a service did not experience a large change in any single factor that would flag it for review; rather, it underwent small changes in several factors that in combination warrant reevaluation.

The unreviewed RVU volume is spread over many codes (about half of the services in the fee schedule). It is not practicable for CMS and the RUC to undertake a review of this magnitude at one time. An alternative to reviewing all previously unreviewed services simultaneously would be to periodically review a sample of codes within

different types of services. Such a review would confirm the validity of the RVUs and detect problems in valuation that were not identified by the data analyses previously discussed.

RECOMMENDATION 3 - 4

To ensure the validity of the physician fee schedule, the Secretary should review all services periodically.

RATIONALE 3 - 4

Although the volume for many services is small, the valuation of all services needs to be confirmed or revised periodically to keep the fee schedule as accurate as possible. The data analyses we recommend above are intended to identify relative values that are no longer accurate, but inaccuracies could persist within the fee schedule. Therefore periodic review of all services is necessary to maintain the robustness of the payment system.

IMPLICATIONS 3 - 4

Spending

- Given budget neutral implementation, this recommendation will have no effect on program spending.

Beneficiary and provider

- In general, any effects on beneficiaries and providers are likely to be small. This recommendation is expected to make payments under the physician fee schedule more accurate and thus could have redistributive effects on providers.

We recognize that the resources of the RUC and the Secretary are limited. The Secretary should choose a strategy to achieve our recommendations that best fits the agency's resource constraints. One approach is for CMS, on an annual basis, to select a sample of codes from those that have not yet been reviewed and have its own panel of experts consider the valuations. Those services that appear to warrant review could be forwarded to the RUC. The RUC, in turn, would use its regular process to review the services and make recommendations to CMS.

Future work

The recommendations in this chapter represent the first step in the Commission's work on pricing of services in the physician fee schedule. In future reports, we will consider other elements of the fee schedule, including adjustment of payments for input prices that vary geographically, the boundaries of payment localities, methods for determining practice expense RVUs, and the fee schedule's unit of payment. In addition, we are concerned about income differences among physician specialties, including the disparities in remuneration between primary and specialty care, and the implications of those disparities for the future of the physician workforce required to meet the chronic care and other needs of Medicare beneficiaries. Some recent surveys of the career plans of medical students and residents suggest that a declining number may be choosing primary care (Association of American Medical Colleges 2006, Garibaldi et al. 2005); other specialties may also be facing shortages. Finally, the Commission will consider opportunities to improve the value of services Medicare purchases, with a goal of identifying cost-effective services. ■

Endnotes

- 1 The SGR determines the spending target for physician services. It is composed of growth rates for: enrollment in Medicare fee-for service; input prices for physician services; physician services spending due to changes in law and regulations; and, as an allowance for volume increases, real gross domestic product per capita.
- 2 This analysis examined total relative value unit (RVU) volume. Work RVUs account for slightly more than half of total RVUs.
- 3 Section 1848(c)(2)(B)(i) of the Social Security Act (42 U.S.C. 1395).
- 4 Both of the previous five-year reviews would have resulted in increases in total estimated payments under the physician fee schedule, thus triggering the budget neutrality adjustment. After the first five-year review, the Health Care Financing Administration (HCFA) (now CMS) reduced the work RVUs by 8.3 percent overall. The impact of the adjustment on the payment for any individual service depended on what percentage the work RVUs represented of the service's total RVUs. As a result of the second five-year review, HCFA reduced the conversion factor by 0.3 percent; all services were affected equally by this adjustment. CMS also sometimes makes budget neutrality adjustments within families of codes, in which case other types of services are not affected.
- 5 The psychometric technique of magnitude estimation was used to obtain objective estimates of physician work. In a national survey, physicians were asked to rate about 25 services (depending on the specialty in question), relative to a reference service that differed by specialty. The individual physicians' results were averaged across each vignette to yield a specialty-specific scale of relative work values for the services in question. A cross-specialty linking for selected services was performed to place all surveyed services on a common scale. The cross-linking services were selected by a multi-specialty group of surveyed physicians. Multivariate regression analysis was used to link services across all specialties. During a second and third phase of the project, virtually all physician services were surveyed, either through national random samples or small, expert groups of physicians.
- 6 Until recently, the practice expense and malpractice components were not resource-based, so CMS has excluded them from the five-year reviews.
- 7 CMS uses clear cutoffs for this determination, using differences greater than one standard deviation as the threshold for adopting the panel's recommended valuation.
- 8 CMS identified 168 codes for RUC review: 149 codes that the RUC has never reviewed, 1 low-volume code that is valued as being performed in the inpatient setting but that CMS believes is now predominantly performed in the outpatient setting, and 19 codes that CMS believes have experienced advances in technology that are likely to have changed the amount of work required to perform them.

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