

CHAPTER

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**The sustainable growth  
rate system:  
Policy considerations for  
adjustments and alternatives**

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# The sustainable growth rate system: Policy considerations for adjustments and alternatives

## Chapter summary

Medicare’s payment system for physician and other health professional services is flawed in many ways: It continues to call for unrealistically steep fee cuts, it inherently rewards volume over quality and efficiency, and it favors procedural services over primary care, which has serious implications for the nation’s future primary care workforce. The Commission is concerned about these issues, particularly because physicians and other health professionals are often the most important link between beneficiaries and the health care delivery system.

### **Sustainable growth rate system raises policy and budget concerns**

In current law, a formulaic expenditure target system—known as the sustainable growth rate (SGR) system—requires Medicare payment rates for physician and other health professional services to be cut by about 30 percent in 2012. As the size of this cut has grown over much of the last decade, Medicare is confronting mounting frustration in the provider community that could jeopardize beneficiaries’ future access to care. Although the Congress has repeatedly taken action to override most of the SGR’s prescribed fee schedule reductions, these “fixes” have been temporary, accounting for relatively small periods of time. As a consequence, the frequent need to override increasingly steeper cuts is undermining confidence in the Medicare program.

## In this chapter

- Background: What is the sustainable growth rate system?
- SGR policy issues
- Improving the accuracy of payments to physicians and other health professionals

Beyond the issue of looming payment cuts are two fundamental problems with the current SGR system. The first set of problems relates to its design as a strict budgetary tool, with no mechanism for influencing provider performance toward improved care and prudent use of resources. In comparing total spending with a calculated target, the SGR formula aggregates spending across all physicians furnishing services to Medicare beneficiaries and, therefore, does not provide incentives for individual physician practices to control health care spending or improve care quality. Moreover, the SGR system does little to counter the volume incentives that are inherent in fee-for-service payments.

The second problem policymakers face with respect to the SGR is the cost of replacing or restructuring it. According to the Congressional Budget Office, eliminating the SGR fee cuts and replacing them with a 10-year freeze in fee schedule rates would cost about \$300 billion—at a minimum. The Commission is committed to helping the Congress continue to find budgetary offsets within Medicare. For example, some Medicare policy changes—such as smaller updates in other provider sectors, as recommended in our March 2011 report—could partially offset this amount. It is unlikely, however, that the full offset needed to eliminate the SGR cuts can be found easily in Medicare within the applicable budget window.

### **Expenditure target formulas present several issues**

In considering replacement of the SGR system, a fundamental issue is whether to maintain an expenditure target—either narrowly (i.e., in the physician fee schedule) or more broadly throughout all of Medicare. Some contend that expenditure target policies offer no method for improving how providers deliver services. Rather, their restraint on payment rates may encourage providers to engage in activities that ultimately result in higher volume and Medicare costs. Others contend that pressure from the SGR has at least resulted in smaller updates and, considering Medicare’s fiscal sustainability problems, it is prudent to retain an expenditure target system to have some limit on spending growth and to regularly alert policymakers about growth in Medicare spending. As indicated below, the Commission is discussing whether spending can be constrained by using a more discretionary, targeted approach.

Many Commissioners have expressed a concern that expenditure targets should not be borne solely by physicians and clinical practitioners. The Commission has also discussed how broader targets would spread cost restraints across sectors. Broader expenditure target systems, however, carry many of the same risks as the SGR system. That is, if volume trends are not restrained, a broader expenditure target system could require larger scale rate reductions, depending on the construction of

the system's formula. As an alternative to expenditure targets, we may consider a policy that would link payment updates for all physicians to progress in improving the accuracy of payments for selected services. Research discussed in this chapter has shown that at least some of the fee schedule's payment rates are likely too high, perhaps by a wide margin.

### **SGR termination could be contingent on a set of trade-offs to improve the payment system**

An alternative to expenditure target systems is to pursue a multipronged strategy with several components, each addressing aspects of Medicare's payment approach for physicians and other health professionals. Aspects to address within the fee-for-service system include the accuracy of fee schedule payments, the Secretary's option to adjust these fees, and the level of payments for cognitive (or nonprocedural) services relative to procedures. Outside the fee-for-service system, additional approaches could include steps toward delivery system reform and alternative payment models such as accountable care organizations, medical homes, and bundling.

Replacing the SGR with a different payment structure—devoid of the scheduled cuts—presents an opportunity to introduce needed payment changes for fee schedule services. That is, in exchange for eliminating future fee cuts, new policies could be implemented that improve and stabilize the fee schedule, restrain cost growth, and promote primary care and better coordination across sectors. The Commission is considering a range of policy ideas for reform:

- Set limited future updates in law, across all fee schedule services.
- Make the above updates contingent on the Secretary identifying and reducing the relative values for overpriced fee schedule services. The net savings the Secretary would achieve from these service-specific reductions would also be defined in law.
- Enhance efforts to continuously improve the accuracy of fee schedule payments, with particular attention to estimates of the time required to provide services.
- Realign payments for physician and other health professionals to help ensure an adequate supply of practitioners in cognitive (nonprocedural) specialties who focus on managing patients with chronic conditions.
- Reform delivery systems to shift payment away from the fee schedule's disproportionate emphasis on procedures and tests and toward payment models focused more on care coordination and population health.

The above is not an exhaustive list of policies that could be considered in replacing the SGR. We will consider other policies as well. However, this set of policies, even if implemented on a staggered basis, represents a path to move away from the SGR and its negative effects. While the prospect of replacing the SGR could serve as a vehicle for hastening at least some elements of reform, a potential SGR replacement need not await full implementation of all reform elements. Reform is not a single event but a multipart process that unfolds over time.

**Interim updates should apply for a minimum of one year**

Considering the time and effort that will be involved in determining how to structure future payments for physician and other health professional services, interim fee schedule updates should apply for a minimum of one year—ideally at least two years—to provide stability for CMS, claims-processing contractors, and practitioners who bill Medicare. Furthermore, these updates should be scheduled well in advance of their applicable time periods to provide certainty about the level of payment. Significant problems arose in 2010 when updates applied to shorter time periods and were so delayed that they had to be applied retroactively. In addition to added administrative costs for CMS’s claims processing and cash flow problems for some clinical practices, the most disturbing outcome resulting from the short-term fixes was damage to patients’ and providers’ confidence in Medicare. ■

Medicare's payment system for physician and other health professional services is flawed in many ways: It continues to call for unrealistically steep fee cuts (i.e., about 30 percent in 2012), it inherently rewards volume over quality and efficiency, and it favors procedural services over primary care, which has serious implications for the nation's future primary care workforce.

Given the continual threat of fee cuts during much of the past decade, the Commission is concerned that Medicare is facing mounting frustration from the provider community that could jeopardize beneficiaries' future access to physicians and other health professionals. Although the Congress has repeatedly taken legislative action to override most of these fee schedule reductions, these "fixes" have been temporary, accounting for relatively small periods of time. As a consequence, the frequent need to override increasingly steeper cuts is undermining patient and provider confidence in the Medicare program.

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## **Background: What is the sustainable growth rate system?**

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The sustainable growth rate (SGR) system is the formulaic method for annually updating fees for physician and other health professional services. Established by the Balanced Budget Act of 1997, the SGR system was designed to keep aggregate Medicare expenditures for these services on an affordable ("sustainable") trajectory, through an expenditure target approach.

The SGR system sets an expenditure target for growth in Medicare spending on fee schedule services. This target allows for annual Medicare spending to grow at a rate consistent with the sum of four factors—namely, changes in:

- the nation's per capita gross domestic product (GDP),
- the number of beneficiaries enrolled in fee-for-service (FFS) Medicare,
- inflation in practice costs for physicians and other health professionals, and
- spending due to law and regulation.

With respect to the first factor—per capita GDP—the SGR formula essentially allows the volume of fee schedule services to grow at the same rate as per capita GDP. Volume is tightly linked to spending because Medicare pays providers on an FFS basis. Therefore, when the SGR

spending target allows for growth in the nation's per capita GDP, the formula allows for the volume of fee schedule services to grow at the same rate. Additionally, the SGR expenditure target is adjusted to account for three other factors: changes in the number of Medicare beneficiaries, changes in physician practice costs, and changes in covered services due to law and regulation. When these rates increase, so does the expenditure target, essentially allowing higher aggregate spending.

To determine fee schedule updates under the SGR, CMS is required, annually, to compare actual cumulative Medicare spending (starting in April 1996) on fee schedule services with the target amount over the same period. If cumulative expenditures equal the cumulative target, the SGR formula sets physician fee updates to the Medicare Economic Index (MEI). However, if expenditures exceed the spending target, the update for the subsequent year is reduced, with the goal of bringing cumulative spending back in line with the target. (The reverse is also true; if cumulative expenditures are less than the target amount, then the subsequent year's update is higher.)

In the first several years of the SGR system, actual expenditures did not exceed spending targets because volume did not grow faster than per capita GDP. Therefore, updates to the physician fee schedule in the early years of the SGR system were at or above the MEI. However, beginning in 2001, actual cumulative expenditures exceeded allowed targets and the discrepancy has grown each year, resulting in a series of ever-larger cuts prescribed under the formula. With the exception of 2002, the Congress has passed a series of bills to override these reductions. The resulting updates have been fairly modest. Overrides that were implemented before 2007 contributed to the amount of dollars that need to be recouped under the SGR formula.

The primary rationale for each override of the SGR cuts has been to preserve beneficiary access to physician services. The reason why the overrides have been short term is that longer term adjustments have higher estimated costs ("scores") and thus require the Congress to find proportionately larger spending offsets. (The text box, p. 8, explains the budgetary costs in further detail.) The most recent override expires on December 31, 2011, after which payments are set to decline under current law by 29.5 percent. Although official estimates have not been released, further prescribed cuts in 2013 and 2014 are also expected. Nevertheless, even the Medicare Trustees refer to the SGR cuts in current law as "unrealistic" (Boards of Trustees 2010).

## Why does it cost so much to “fix” the sustainable growth rate system?

Despite general acceptance that multiple consecutive years of large negative updates for physician and other health professional services would be detrimental to beneficiary access to care, longer term proposals to fix the sustainable growth rate (SGR) system face a major hurdle: They carry high budgetary costs (“scores”) compared with current law, which assumes that steep payment reductions will occur in the coming years. The estimated scores for some long-term proposals are more than 10 times greater than the cumulated difference between actual and target spending amounts. For instance, although the current cumulated overage in spending compared with the target differs by about \$20 billion, the Congressional Budget Office scores a freeze (i.e., a 0 percent update) from 2012 through 2021 at \$298 billion.

Why does it cost so much to eliminate the SGR cuts? And more specifically, why is there such a large difference between the cumulated overage and the price of eliminating negative updates through 2021? Two main factors are at play:

- The cumulated overage between actual and target spending compounds every year that the fee reductions are postponed—retrospectively and prospectively. Also, the spending attributable to the 2003–2006 overrides was added to the total amount of dollars that must be recouped in accordance with the SGR formula. Thus, these overrides resulted in increasing the deficit between actual cumulative spending and the SGR cumulative target.
- Under current law, the reduced future fees would become the base for payment levels in all subsequent years. So, while cumulative spending would equal the SGR target after the 30 percent cut,

the updates would be based on much lower fees. In other words, a fee that is \$100 today is scheduled to drop to \$70 in 2012, and subsequent updates would start from the \$70 level. Proposals that restore future fees to today’s levels or higher have to account for the aggregate cost of each and every year in which fees are above \$70—or even less, assuming further cuts in 2013 and 2014. This circumstance highlights that the bulk of the SGR costs stems from averting future cuts rather than making up for past spending above the target.

Recognizing these two factors, we see that the gap between projected spending under current law and projected spending under long-term SGR-modification proposals grows increasingly larger every year. In one administrative action, however, CMS reduced the amount that was needed to be recouped by retroactively removing Part B drugs (generally those administered in a physician’s office) from all SGR calculations.

Eliminating the SGR cuts has budgetary ramifications beyond Medicare’s payments for physician services. For example, expenditures under the Medicare Advantage (MA) program would increase because the MA capitation payments are tied to fee-for-service benchmark spending. The military’s TRICARE expenditures would also rise because its physician reimbursements are based on Medicare’s physician fee schedule. Furthermore, since Medicare Part B premiums are required to cover 25 percent of total Part B expenditures, increases in physician reimbursement levels would likewise raise future Part B premiums. Alternatively, if these premiums were not increased, the budgetary score for eliminating the SGR cuts would be significantly higher. ■

### SGR policy issues

In previous reports, congressional testimonies, and public deliberations, the Commission has reiterated several widely held criticisms and flaws of the SGR system (Medicare Payment Advisory Commission 2007, Medicare Payment Advisory Commission 2011). A main flaw of the

current SGR system is its inability to differentiate among providers; it neither rewards individual practitioners who restrain unnecessary volume growth nor penalizes those who contribute most to inappropriate volume increases. The SGR also results in a so-called “passive devaluation” problem for specialties that are highly dependent on evaluation and management (E&M) services (such as primary care). That is, procedural specialties can more



readily compensate for fee restrictions by generating greater service volume. Under the SGR, this higher volume will likely lead to restraints on fees, further disadvantaging E&M-dependent specialties that are less able to increase volume. Moreover, the SGR does little to counter the volume incentives that are inherent in FFS payments. While some contend that the existence of the SGR system exerted pressure to restrain fee updates in recent years, it is not clear that it lowered total spending.

Perhaps an even greater problem with the SGR system is its toxic effect on Medicare's reputation. Providers have expressed deep frustration and stress attributed to uncertain future Medicare payments, short-term "fixes," and looming payment cuts in the balance. Often referred to as temporary fixes, legislative SGR overrides have accounted for relatively small periods of time. For 2011, the Congress passed a 1-year override; for 2010, two 1-month overrides, two 2-month overrides, and one 6-month override. While these stopgap measures successfully averted payment cuts, their short-term nature was problematic. Moreover, the threat of steep payment cuts continues to loom in the near future.

Therefore, in addition to systemic flaws with the formulaic nature of the SGR system, there is widespread agreement that the updates it has prescribed are unrealistic and untenable. Consequently, the existence of the SGR system, which continues to call for large payment cuts and requires congressional action to override, could jeopardize provider willingness to serve Medicare beneficiaries in the future. The temporary fixes implemented in recent years have created uncertainty, frustration, and financial problems for clinical practices. Furthermore, they add significant administrative costs to CMS's claims-processing activities.

Additional complications arise from the unrealistic updates that remain in current law under the SGR system. Specifically, Medicare's physician fee schedule is used as a benchmark for rate setting in other health programs, such as Medicare Advantage and the military's TRICARE program, as a basis for private payers' fee schedules, and as a tool for provider organizations to measure physician productivity. On a larger scale, regarding future Medicare reforms (such as accountable care organizations (ACOs) and other shared savings initiatives that seek to improve the quality and efficiency of care delivery), it will be important for the Congress and the Secretary to use actual and realistic fee schedule updates when analyzing the potential for these reforms to be effective. If unrealistic updates (i.e., those in current law under the SGR) are used

in these analyses, the budget baseline will be artificially low, making it difficult to determine whether payment innovations reduce total spending.

Solving the SGR problem must be considered in light of two fundamental issues, each requiring different policy tools and actions:

- **Replacement update and payment method**—To address some of the SGR flaws, Medicare needs to structure a stable payment system for physicians and health professionals that rewards practitioners' quality and efficiency to the extent possible. Changes would involve reforming Medicare's payment systems to motivate coordination and collaboration among practitioners rather than volume. At the same time, ongoing efforts should be made to balance compensation among providers and to improve payment accuracy within the fee schedule.
- **Budgetary ("scoring") issues**—Positive updates for fee schedule services in future years carry high budgetary scores. For an across-the-board freeze (no increase) in updates from 2012 through 2021, the Congressional Budget Office estimates the cost at \$298 billion. Estimated costs for an update equal to the MEI over the same time period are higher. Higher still are estimates that include policies in which beneficiaries' Part B premiums are held harmless from this spending increase. Under current law, replacing or changing the SGR to achieve positive updates in the coming years requires offsets in federal spending.<sup>1</sup>

In consideration of these two categories of issues, we briefly discuss several policy opportunities for future updates and for setting Medicare payments on the path to improved care delivery. Then, we examine some issues surrounding the high budget score involved with eliminating the SGR cuts.

### **Expenditure target formulas raise several issues**

In considering replacement of the SGR system, a fundamental issue is whether to maintain a formulaic expenditure target component—either as a target covering the fee schedule system or more broadly covering all of FFS Medicare or the entire Medicare program. In general, disagreement about the utility of formulaic expenditure targets exists among policy analysts and experts. Some contend that expenditure target policies offer no method for improving how providers deliver services. Rather, their restraint on payment rates may

encourage providers to engage in activities that ultimately result in higher Medicare costs—for example, furnishing services of marginal value or prioritizing services by their profitability, which raises patient access concerns for services that generally have lower profitability, such as nonprocedural services.

Other experts contend that, considering Medicare’s fiscal sustainability problems, it is prudent to retain an expenditure target to limit payment rate increases and regularly alert policymakers about growth in Medicare spending. With respect to the SGR, its expenditure target mechanism was likely an influential factor in constraining updates in the past several years. Nevertheless, spending per beneficiary grew much faster than the updates.

In 2001, the Commission recommended that the Congress replace the SGR system and require that the Secretary update physician payments for the coming year based on factors influencing the unit costs of efficiently providing physician services. Under this recommendation, the Commission would examine payment adequacy indicators annually and advise the Congress accordingly—with no expenditure target framework. When the Commission made this recommendation, it would have had little budgetary effect on Medicare spending.

In our 2007 SGR report, the Commission explored alternatives that would eliminate the SGR, restructure its formula, or broaden the expenditure target approach to include all of FFS Medicare (Medicare Payment Advisory Commission 2007). For instance, discussions about restructuring the SGR’s formula examined many of the design elements of expenditure target systems, including the following parameters (discussed in detail in our 2007 report cited above):

- the scope of services affected by the expenditure target system;
- the spending growth targets;
- potential variation in spending targets by selected characteristics (e.g., type of service);
- corresponding updates when spending is above, below, or on target;
- the degree of a cumulative aspect in spending calculations; and
- possible exemptions for selected entities such as participants in medical homes.

Many Commissioners have expressed a concern that expenditure targets should not be borne solely by physicians and clinical practitioners. The Commission has also discussed how broader targets would spread cost restraints across sectors. However, they carry many of the same risks as the SGR system. That is, if volume trends are not restrained, a broader expenditure target system could call for larger scale rate reductions, depending on the construction of the system’s formula.

Another expenditure target option would link payment updates to progress in improving the accuracy of payments under the physician fee schedule. Research discussed later in this chapter has shown that at least some of the fee schedule payment rates are likely too high, perhaps by a wide margin. To create an action-forcing mechanism, the Congress could require that the Secretary identify and reduce payments for overpriced services. More precisely, the update for all physicians could be contingent on the Secretary identifying and reducing the relative values for overpriced services. The amount of the reduction necessary for a full update would be set in law.

### **SGR termination could be contingent on a set of trade-offs to improve the payment system**

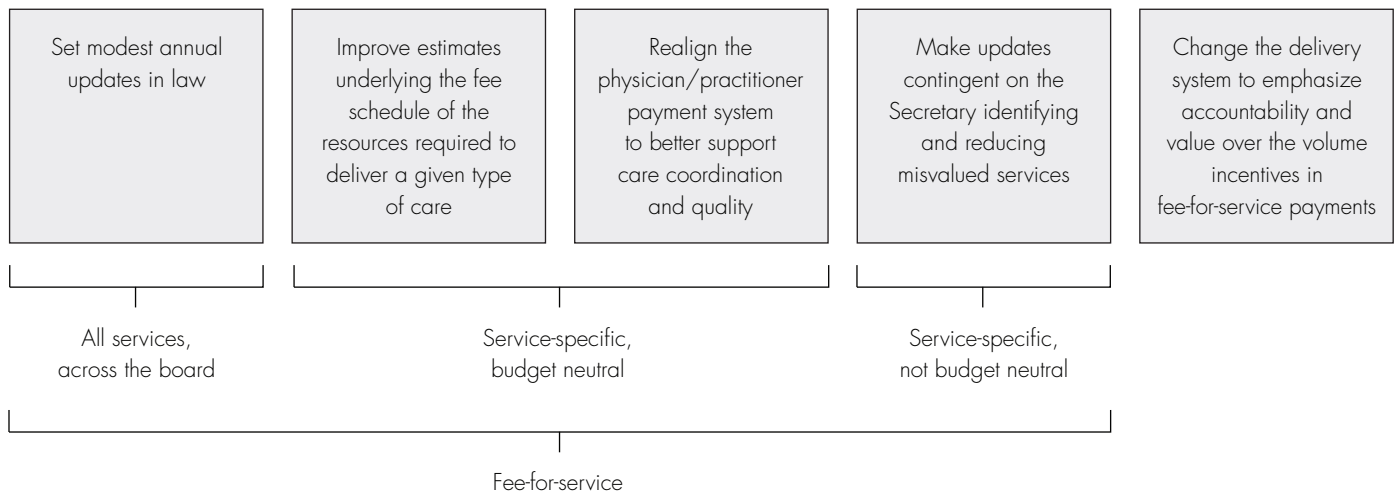
Replacing the SGR with a different payment structure—devoid of the scheduled cuts—presents an opportunity to introduce needed payment changes for fee schedule services. That is, in exchange for eliminating the future fee cuts, new policies that improve and stabilize the fee schedule, restrain cost growth, and promote primary care and better coordination across sectors could be implemented. Such policies could create incentives for high-quality, patient-centric care that would replace current incentives to increase volume and thus could significantly change the status quo.

The Commission is considering a range of policy ideas for reform (Figure 1-1):

- For a specified number of years, Medicare’s physician fee schedule updates could be set at modest levels—established in law—to replace the SGR’s future fee cuts. Such a statutory series of updates would achieve the same restraint in price growth as has been legislated through SGR overrides in the last several years but with fewer deleterious effects. For instance, it would provide security and stability to providers regarding their payments and would reduce uncertainty about their willingness to accept Medicare patients.

**FIGURE  
1-1**

## Typology of policies that could link to replacing the SGR system



Note: SGR (sustainable growth rate).

- A comprehensive physician payment policy could include a concerted effort to improve the accuracy of the estimates embedded in the physician fee schedule, specifically those that pertain to the time and intensity required to provide given services. One set of ideas for improving payment accuracy—collecting data from a cohort of practices and other settings where practitioners work—is discussed later in this chapter. Previously, the Commission made recommendations to improve the accuracy of payments for costly imaging services by incorporating more realistic assumptions about equipment use rate in the calculation of payments. Chapter 2 of this report includes specific recommendations on improving the accuracy of payments for ancillary services.
- Appropriate evaluation, management, and coordination of patients’ care (among providers and across sectors) are especially crucial for elderly and disabled patients with chronic conditions. Future changes to the payment system for physicians and other health professionals should recognize the importance of these activities in ensuring comprehensive, population-based care for Medicare beneficiaries. Toward that end, we envision some shift of resources from procedural to cognitive services—particularly for physicians and health professionals who focus on managing patients with chronic conditions. This shift would help overcome the relatively lower reimbursements for primary care and ensure a workforce with greater emphasis on generalists. Although payment rates for primary care services (and E&M services, in particular) have increased over the last several years, a concentrated realignment of the payment system is still needed.
- The Commission’s longstanding position is that unnecessary growth in the volume of services furnished by physicians and other professionals is driven in part by the overpricing of a number of services in the physician fee schedule. The Congress could require that the Secretary identify and reduce payments for overpriced services, in a non-budget-neutral manner. More specifically, the Congress could make future, across-the-board fee schedule updates contingent on the Secretary identifying and reducing relative values for overpriced services. The amount of net savings needed from such reductions could be set in law.
- Future payment policies should be designed to move toward alternative payment models that focus on population health and coordination of care—such as ACOs, medical homes, bundling, and similar payment models. With existing payment methods, volume growth has remained high—even under the SGR—because of the underlying incentives in FFS reimbursement. New payment models can change those incentives in fundamental ways by establishing

accountability for quality and efficient use of resources.

The above list is not an exhaustive list of policies that could be considered in replacing the SGR. We will consider others as well. However, this set of policies, even if implemented on a staggered basis, represents a path to move away from the SGR and its negative effects. Payment reform is not a single event but a multipart process that unfolds over time. Pursuing an SGR replacement policy that incorporates all five or more of these reforms need not await resolution of all policy issues.

While pressure from the SGR may have resulted in smaller annual updates than would have occurred in the absence of the SGR, it has taken a significant toll on providers and beneficiaries in terms of their confidence in the Medicare program. These effects only worsen as the SGR deficit grows and the temporary fixes cover shorter periods of time. Last-minute rescues impose burdens on practitioners, beneficiaries, and CMS administration. Given that the budget score for these rescues will continue to increase, resulting in greater difficulty finding offsets within the budget window to pay for eliminating the SGR, we fear a downward spiral. One option the Commission is considering is to repeal the SGR and pursue a range of policies such as those discussed above.

### **Budget issues**

Given the cost of replacing the SGR, the Commission is committed to helping the Congress find budgetary offsets within Medicare. The Commission has made numerous recommendations that would produce significant savings, many of which the Congress has embraced. It is unlikely, however, that the full offset needed to eliminate the SGR cuts can be found easily in Medicare within the necessary budget window of time—particularly considering that \$575 billion in Medicare savings is already slated for implementation, in accordance with the Patient Protection and Affordable Care Act of 2010 (PPACA) (Foster 2010).

In its March 2011 report, the Commission made recommendations that would produce federal savings to the Medicare program (Medicare Payment Advisory Commission 2011). For example, for 2012 we recommended either payment reductions or payment freezes for home health agencies, skilled nursing facilities, and inpatient rehabilitation facilities. The Commission based these recommendations on careful analysis of several factors, including beneficiaries' access to care,

changes in quality over time, and the relationship between practitioners' costs and their Medicare payments. These analyses are described in more detail in the report. In upcoming work, the Commission will continue to analyze other options within Medicare that could help offset the additional spending that would result from eliminating the SGR cuts.

### **Interim future updates should apply for a minimum of one year**

While determining a new way to set updates for fee schedule services, interim payment rates for these services should apply for a minimum of one year—ideally at least two years. Furthermore, these updates should be scheduled well in advance of their applicable time periods. Significant problems arose in 2010 when updates applied to shorter time periods and were so delayed that they had to be applied retroactively. It caused cash flow problems for some clinical practices and added administrative costs for CMS's claims processing. Overall, the most disturbing outcome of multiple short-term fixes could be damage to patients' and providers' confidence in the Medicare program.

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### **Improving the accuracy of payments to physicians and other health professionals**

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Improving the accuracy of prices in Medicare's payment systems is an urgent concern. Overpriced services are subject to being overprovided when they become more profitable than other services. In the case of services furnished by physicians and other professionals, overpricing can skew compensation levels—favoring some practitioners at the expense of others. Distorted compensation can discourage new practitioners from entering certain specialties, such as primary care, and may induce some physicians to retire when they might otherwise remain in practice.

Improving payment accuracy is also a step in the evolution of Medicare's payment systems. Medical homes, bundled payments, ACOs, and other innovations would move payment systems away from FFS payment, with its incentives to provide services based solely on volume, and toward systems of providers who accept some level of financial risk for the services they provide. In the meantime, accurate prices under Medicare's current FFS system—together with comparative effectiveness



information, measures that link payment to quality, and measurement of resource use—are needed to ensure that providers have incentives to furnish low-cost, high-quality care for Medicare beneficiaries. Accurate FFS prices could serve as building blocks for units of payment—such as bundled payments—that are a composite of payments for discrete services (Berenson 2010). By overcoming current distortions, accurate prices may affect the willingness of some physicians to participate in ACOs and other innovative payment arrangements.

For services furnished by physicians and other professionals, Medicare's FFS payment system is the program's physician fee schedule. The fee schedule is designed to account for differences among services in resource costs classified into three categories: the work of the practitioner, practice expense, and professional liability insurance. This chapter focuses primarily on the accuracy of the payments for practitioner work, which account for about 48 percent of fee schedule payments, and considers the accuracy of payments for practice expense, which account for another 47 percent of fee schedule payments.<sup>2</sup>

Research for CMS and the Assistant Secretary for Planning and Evaluation of the Department of Health and Human Services has shown that the time estimates (an important factor in the practitioner work category) are likely too high for some services (Cromwell et al. 2010, Cromwell et al. 2007, McCall et al. 2006). Overstated time estimates can cause a service to be overvalued and—because changes in fee schedule payment rates are budget neutral—other services to be undervalued. In addition, as discussed in Chapter 2 of this report, research by the Government Accountability Office has found that Medicare's physician fee schedule does not adequately account for efficiencies that occur when a physician furnishes multiple services for the same patient on the same day (Government Accountability Office 2009). Taken together, these research findings lead the Commission to have a deep concern about the accuracy of the time estimates and to conclude that the time data are flawed.

Pricing accuracy has taken on greater importance under the PPACA requirement that the Secretary establish a process to validate the fee schedule's relative value units (RVUs). The validation process is to include a sampling of services that meet criteria such as rapid growth, use of new technologies, and substantial changes in practice expenses or that meet other criteria

for identifying services that may be misvalued. The process is to consider work elements such as time, mental effort, and other factors. As part of the process, the law gives the Secretary the authority to make appropriate adjustments to the RVUs for practitioner work. CMS sees validation of RVUs as a new requirement and one that would complement the ongoing efforts of the Relative Value Scale Update Committee (RUC) to provide recommendations on valuation of fee schedule services.<sup>3</sup>

The Commission is concerned that the process for developing time estimates relies on surveys conducted by physician specialty societies and that those societies and their members have a financial stake in the process. To address the issue, the Commission is examining a specific alternative to the time estimates.

After working with a contractor to consider alternatives, we find that CMS could replace the current time estimates with data collected from physician offices and other settings where practitioners provide care. The data will not be collected easily, however, if the methodologic decision is made to collect data on the time practitioners spend on each discrete billable service. Nonetheless, there may be approaches to collecting data that reduce the burden for CMS and practitioners and that make the effort feasible.

While collecting objective time data has evident challenges, we do not consider it reasonable and prudent to base more than \$60 billion in annual Medicare spending on the current process of collecting time data by specialty societies. While the RUC does attempt to adjudicate the time estimates and the resulting RVUs, the process lacks an objective basis for modifying the time estimates. Both the RUC's and CMS's responsibilities would be furthered with timely provision of objective data, with the limitations of these data understood.

Ensuring the accuracy of estimates for the practice expense component of a fee is also important. There are two data problems in developing these estimates. First, the estimates rely in part on information about the prices practitioners pay for equipment and supplies, and CMS does not have a data source that allows for regular updating of these prices. Second, the estimates also rely on data obtained from a survey on total practice costs incurred by practitioners, and CMS has not articulated a strategy for keeping the survey data up to date. Our conclusion is that it is feasible to collect practice expense data while collecting data to replace the time estimates for practitioner work.

## **Assigning relative values to services furnished by physicians and other health professionals**

The fee schedule's RVUs account for the relative costliness of the resources used to provide services: the work of physicians and other health professionals, practice expenses, and professional liability insurance (PLI) expenses. The RVUs for practitioner work are a scale rating the time, mental effort and judgment, technical skill and physical effort, and stress associated with providing each service relative to other services. The RVUs for practice expense are measures of the expenses practitioners incur for office space, supplies and equipment, and nonphysician clinical and administrative staff. The PLI RVUs are based on the premiums physicians pay for professional liability insurance, also known as medical malpractice insurance.

Resource-based payments for practitioner services began with a research project at the Harvard School of Public Health conducted in the 1980s under a cooperative agreement with the Health Care Financing Administration, now CMS. The Harvard investigators surveyed approximately 4,000 physicians using vignettes describing typical clinical scenarios for each service considered. The resulting resource-based work RVUs were first used for payment in 1992. Depending on the service, the current work RVUs are from one of two sources:

- the Harvard research, or
- CMS, based on recommendations from the RUC.

For practice expenses, CMS established resource-based payments starting in 1999 with RVUs determined according to a methodology developed by the agency. Resource-based payments for PLI started in 2000 based on a CMS-developed methodology.

Medicare adopted the fee schedule to remedy problems inherent in the prior 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 resource costs 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 (Physician Payment Review Commission 1987).

The resource-based payment system has three limitations. First, it is vulnerable to mispricing. As an example, the assigned RVUs for a service may become too high over time when practitioners and staff gain the ability to furnish the service more quickly and routinely than when it was first introduced into medical or surgical practice. Consequently, practitioners can increase their service volume—and payments received from Medicare—with little change in the number of hours they work.

Second, resource-based payments generally ascribe higher values to performing procedures than to conducting E&M services. The higher relative values and the greater ability to generate volume result in significantly higher cumulative reimbursements for specialties that perform more procedures than for those that do not, such as primary care. This differential raises concerns about future career choices for physicians.

Third, resource-based payments do not adequately account for the relative effects of different services on clinical outcomes. In other words, a resource-based payment system values all services on an equal footing, regardless of their clinical efficacy. The Commission has contracted with the University of Minnesota to examine whether the private sector has developed innovative approaches to valuing practitioner services (see text box, pp. 16–17).

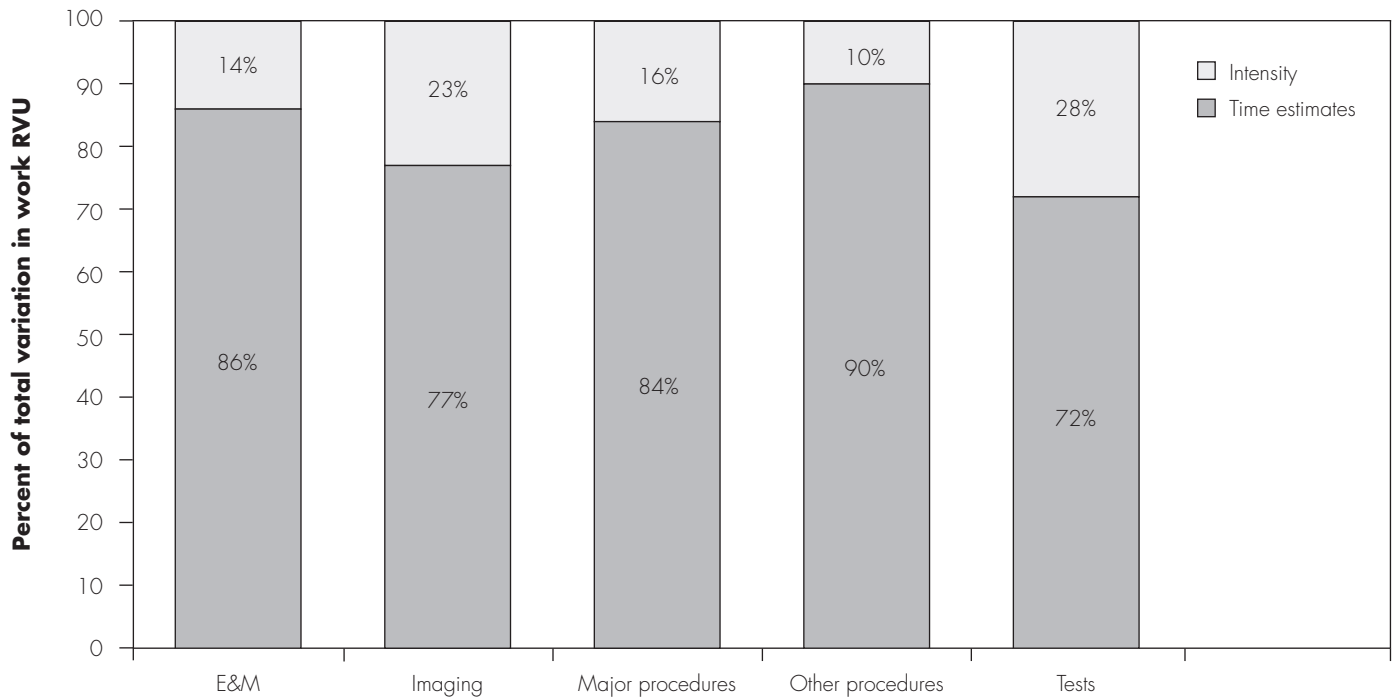
## **Using time estimates to value services furnished by physicians and other health professionals**

According to the Medicare statute, the fee schedule's payments for the work of a practitioner—physician, nurse practitioner, physician assistant, or other practitioner—eligible to bill Medicare work can account for two factors: time and intensity. Time (measured in minutes) is the time a practitioner typically spends furnishing a service. An estimate of such time has been developed for each service listed in the fee schedule.

Intensity, by contrast, is less intuitive both as a concept and in its measurement. Early in their research, the Harvard investigators found that when physicians were asked to give estimates of time and explicit ratings of intensity, their ratings of intensity were confounded with time (Hsiao et al. 1988). Multiplying time and these ratings of intensity resulted in ratings of work that increased exponentially with time, a finding that did not have face validity when presented to physicians. Consequently, the researchers decided that they should not ask physicians for explicit ratings of service intensity. Instead, they used

**FIGURE  
1-2**

**Fee schedule's time estimates explain much variation  
in the relative values for physician work**



Note: RVU (relative value unit), E&M (evaluation and management). The percentages for physician time estimates are from five regression analyses: one for each service type. In these analyses, the log of estimated physician time was the explanatory variable, and the log of work RVU was the dependent variable. The percentages for intensity are the differences between the time percentages and 100 percent.

Source: MedPAC analysis of 2010 time data and work RVUs from CMS.

the method of magnitude estimation whereby physicians gave ratings of work defined as an overall rating that takes into consideration the time required to furnish the service, mental effort and judgment, technical skill and physical effort, and stress due to potential risk for the patient. All these factors are considered relative to a standard reference service in the physicians' specialty. Such ratings of work were found to have face validity with clinicians and to meet statistical tests of internal and external validity. In addition, when the work value for a service is divided by its time estimate (work per unit of time), we get a measure of intensity that is implicit in the measures of work and time.

We find that time explains most of the variation in the work RVUs (Figure 1-2) in each of the broad service categories.<sup>4</sup> Depending on the type of service, the fee schedule's time estimates explain from 72 percent to 90 percent of the variation in the fee schedule's RVUs for practitioner work. Given the strength of this relationship,

the time estimates are an important determinant of the accuracy of the work RVUs.

The time estimates are important also in determining the RVUs for practice expense. For example, when a procedure requires the presence of nonphysician clinical staff (a practice expense input) for 100 percent of the time a physician or other practitioner performs the procedure, the time estimate for nonphysician clinical staff is set equal to the practitioner time. Alternatively, if nonphysician clinical staff are required for only a portion of the time that the practitioner is performing a service, the time estimate for nonphysician clinical staff is set as a percentage of practitioner time.<sup>5</sup>

How might the time estimates become inaccurate? Efficiency gains are one possibility. Many services have never been reexamined to determine whether the average time and intensity of effort necessary to perform them has

## Alternative approaches to valuing services furnished by physicians and other health professionals

Stakeholders and researchers have raised concerns about how Medicare’s physician fee schedule values services provided by physicians and other health professionals. To help inform the Commission’s work in evaluating and improving the physician fee schedule, the Commission contracted with the University of Minnesota to examine alternative approaches used in the private sector to value physician services. The researchers evaluated methods used by health plans to pay for physician services as well as approaches used by integrated delivery systems (which can include hospitals, physician practices, and health plans) and physician groups to compensate employed physicians. We use the term provider organization to refer to both integrated delivery systems and physician groups.

The contractor, with participation by Commission staff, conducted structured interviews with leaders at 24 health plans and provider organizations. Fifteen plans and provider organizations were selected from across the United States and nine were chosen from the Minneapolis–St. Paul market. The researchers focused on the Minneapolis–St. Paul market because of the area’s significant experimentation with new payment mechanisms. Because the organizations in the study were not randomly selected, their payment methods do not necessarily reflect the prevalence of similar

approaches nationally. The key findings from the interviews include:

- Most health plans purchase physician services from provider organizations on a fee-for-service basis. This model leads provider organizations to compensate physicians based (in large part) on the number of services they provide to patients. If health plans shifted from fee-for-service payment to risk sharing, physician compensation models within provider organizations would need to change.
- The most common physician compensation model within provider organizations is based on the number of Medicare work relative value units provided by physicians combined with a target compensation amount. The target compensation is based on compensation for physicians in the same market and specialty. There is often a small adjustment based on quality and patient satisfaction metrics.
- We did not find evidence that plans or provider organizations have developed alternative approaches to valuing individual physician services, such as basing the relative weight of a service on its clinical value for patients.

*(continued next page)*

changed as a result of advances in technology, technique, or other factors. When efficiency gains are achieved, the work value for the affected services should decline accordingly, and—through application of budget-neutrality requirements—the values for all other services should increase (assuming all else equal). But because reviews of services are not always timely, categories of services without new procedures—such as primary care—become undervalued over time and thus risk being underprovided. The converse—that overvalued services may be overprovided—is also a concern.

The process for developing time estimates can be another source of inaccuracy. For the most part, the estimates are based on surveys conducted by physician specialty societies.<sup>6</sup> According to RUC requirements, a survey

must include the participation of at least 30 practicing physicians (American Medical Association 2010). After conducting a survey, a specialty society uses the results to recommend a time estimate (and RVU) and defend its recommendation to the RUC. In turn, the RUC may adopt a specialty society’s recommendation, but the RUC may also decide to refer a recommendation back to the society or may modify the recommendation before submitting it to CMS. Despite the deliberative nature of the process, however, the question is whether the survey data coming from the specialty societies—the starting point for the process—are objective given the specialty societies’ financial stake in the process (Medicare Payment Advisory Commission 2006). Progress has been made in identifying and correcting misvalued services. As an



## Alternative approaches to valuing services furnished by physicians and other health professionals (cont.)

- Collaborative efforts exist between plans and provider organizations to test innovative payment arrangements such as shared-savings models, medical homes, and bundled payments. Some of these efforts have been in existence for several years, whereas others are still in the discussion phase or are in the process of being implemented. Many of the arrangements identified by this study are concentrated in the Minneapolis–St. Paul market. The motivation for these experiments is dissatisfaction with the behavioral incentives in fee-for-service payment systems and a desire by health care providers to gain experience with accountable care organization models that may become prevalent in the future.
- All the plans and most of the integrated delivery systems in the Minneapolis–St. Paul market have negotiated arrangements in which the delivery systems share in the overall savings they can achieve for their patients if total spending (including physician and hospital spending) falls below a negotiated target amount and the systems meet quality goals. In some contracts, delivery systems share in the risk that spending will exceed the target, but this approach is not typical. The interview respondents identified patient attribution—linking patients to the individual providers who serve them—and data sharing between plans and providers as key issues. The high level of patient loyalty to specific delivery systems made it easier to attribute patients. For one delivery system, these new financial arrangements constitute the majority of revenue from private plans.
- Factors that contribute to this high level of innovation in the Minneapolis–St. Paul market include a history of collaboration among plans and providers in quality measurement and improvement, the presence of large integrated delivery systems, and encouragement and support from the public sector and an organized employer group.
- Because shared-savings contracts are in their infancy, most of the organizations were not able to provide empirical evidence of their effectiveness. However, one health plan respondent reported that delivery systems had received significant shared savings in the first two years of the contract. Other respondents have observed behavioral changes among primary care physicians (such as seeking information on the most efficient specialists). ■

example, changes in the RVUs for primary care services have increased payments for these services by 19.6 percent since 2006 (Medicare Payment Advisory Commission 2011). Nonetheless, the process for identifying and correcting misvalued services is occurring over several years and with inherent conflicts.

### Alternative approaches to collecting objective time data

To consider options for collecting objective time data, the Commission has contracted with RTI International for a study that has two objectives:

- identify and evaluate data currently available on the time that physicians and nonphysician clinical

personnel spend in furnishing services billable under Medicare's physician fee schedule.

- assess the feasibility of primary data collection that would provide time estimates from a cohort of physician offices and other settings where physicians and nonphysician clinical practitioners work.

The project is ongoing, but progress to date suggests that time data to replace the fee schedule's current time estimates will not be collected easily. Much work will be necessary to establish an approach to collecting the data, develop data collection methods, carry out data collection activities, and analyze the data collected.

On the question of whether time data are already available from secondary sources, the contractor has found that, with some limitations, sources may be available for services such as E&M and surgical services. Those sources include the National Surgical Quality Improvement Program (NSQIP) and the National Ambulatory Medical Care Survey. However, while procedures in the NSQIP database are identified with billing codes from the Healthcare Common Procedure Coding System (HCPCS), services in other databases (such as the National Ambulatory Medicare Care Survey) are not so identified. The contractor is continuing work to identify whether these databases can be used to produce objective time estimates.

As to primary data collection, the contractor is conducting telephone interviews with managed care organizations and integrated delivery systems. After interviews with representatives of five organizations, the contractor has not found an organization that is collecting clinical service time by HCPCS code. Depending on the organization, there is the possibility of linking time data from electronic health records (EHRs) or patient scheduling systems to billing or encounter data that contain HCPCS codes. Alternatively, it may be possible to add HCPCS codes to time data collected as part of a prospective data collection activity. For the organizations contacted, some assembly of data—perhaps from disparate sources—would be necessary before they could submit time data.

The contractor has developed preliminary findings specific to certain types of services:

- For E&M services, electronically capturing clinical time presents a number of challenges. Face-to-face (intraservice) time may be available using time stamps in EHR systems. One caveat, however, is that it is difficult to know if interruptions occurred during a visit. In addition, some clinicians complete their documentation during the time with the patient while others wait until after the encounter. Either way, it appears that preservice and postservice activities—such as reviewing the medical history before seeing the patient and completing medical record documentation afterward—would be difficult to capture as distinct activities.
- For procedures performed outside an operating room (e.g., endoscopy, cardiac catheterization, removal of skin lesions), time data are generally not collected. It may be possible to estimate the duration of these procedures with information from patient scheduling systems.

- Time data are most likely to be available for the component of major surgical procedures that requires time in a hospital operating room, as recorded in operating room logs. However, it appears that HCPCS codes are not usually attached to such data.

The contractor has also asked interviewees about the acceptance and use of direct observation or time and motion studies. Some thought their clinicians would not welcome direct observation studies. Others may view direct observation differently. For instance, organizations that have adopted “lean” production methods make direct observation a part of their culture (Chalice 2007).

### **Collecting time data from a cohort of practices**

If time data are not sufficiently available from secondary sources, primary data collection will be necessary. The Commission’s June 2006 report discussed two alternatives for collecting primary data. One is to conduct voluntary surveys of practitioners, such as those that have been conducted by the American Medical Association (AMA) and physician specialty societies. The difficulty with this approach is that response rates are usually low; response rates of 20 percent or less are not uncommon (Medicare Payment Advisory Commission 2006). Low response rates raise questions about the representativeness of the practitioners participating and, therefore, the data collected.

Another alternative is to make data reporting mandatory for all, similar to the requirement that institutional providers must submit cost reports. While mandatory reporting would overcome the problem of low response, it would require a change in regulation. In addition, the administrative burden on practitioners could be a problem, depending on the level of detail of reporting requirements.

To avoid the difficulties of voluntary surveys and mandatory cost reports, CMS could collect data on a recurring basis from a cohort of physician offices and other settings where physicians and other health professionals work. These entities would be recruited through a process that would require participation in data reporting among those selected. The cohort would consist of practices with a range of specialties, practitioner types, and services and would be large enough to ensure that estimates derived from the cohort are reliable. CMS could develop a cohort that consisted of practices that were more efficient than others. If necessary, practices could be paid to participate.

This approach to collecting time data could be broadened to also give CMS the opportunity to collect accurate and current data for determining practice expense RVUs (see text box, pp. 20–21). Similar to data for work RVUs, practice expense RVUs are partly a function of estimates of the time that nonphysician clinical staff spend in furnishing services in nonfacility settings such as practitioner offices. Practice expense RVUs also rely on information about the prices that practitioners pay for equipment and supplies, and CMS’s methodology for determining practice expense RVUs requires data on practitioners’ total practice costs.

Collection of data from a cohort of practices would raise a number of methodologic and administrative questions:

- What data are needed to validate the fee schedule’s time estimates?
- If it is necessary to collect time data for discrete HCPCS-coded services furnished in a practice, would the data be needed for all services or a subset? If a subset, what statistical methods could be used to extrapolate to a broader set of services?
- How many practices should participate to ensure that estimates are reliable?
- Would Medicare need to compensate practices for participating in the data collection effort? If so, how would rates be determined?
- Would the cohort of practices remain constant from year to year or is there an advantage to rotating practices into and out of the cohort?
- Are measures of practitioner time affected by factors such as practice patterns that vary geographically, the mix of services furnished by a practice, or a practice’s payer mix? If so, how should the sample design account for such variation?
- Who would collect the data? Would practices submit data according to a standard format or would fieldwork by a CMS contractor be necessary?
- If practices submit the data, would CMS need an audit capability—similar to that for the cost reports submitted by facility-based providers—to ensure data accuracy? How would reported results be verified?
- Such data collection would be costly for CMS. What level of resources would the agency need?

Except for the first two questions—what time data to collect and whether to collect time data for all services or for a subset—these questions are of a type that is typically encountered in research design.

### **What time data are needed?**

The purpose of collecting time data from a cohort of practices is to validate the fee schedule’s time estimates and, as necessary, to replace those estimates with objective data. The data must include an HCPCS code for each service represented. The data must also include the three components of each service: preservice, intraservice, and postservice.

As our contractor has discovered, assembling time data at this level of detail is difficult. For instance, it may be necessary to draw the data from more than one system in a practice—EHR, patient scheduling, billing, etc.—and link data based on data elements such as a patient identifier and date of service that are common to each system, which raises the question of whether there is a way to collect time data but minimize the administrative burden for practices.

There are options that could reduce or eliminate the need for a practice to merge data from multiple systems. For example, CMS could specify a template for data collection. With this template, practices could: (1) tabulate all the services (by HCPCS code) that a given practitioner furnished to his or her patients in a given week of work, and (2) record the total hours worked by the practitioner in the week.

With such data, validation of the fee schedule’s time estimates would be straightforward, as a time estimate for each HCPCS-coded service exists in the fee schedule. Multiplying a practitioner’s units of service by these estimates and summing across all services billed by the practitioner would give an estimate of total hours worked. Estimated hours worked could then be compared with actual hours worked. Any differences found would suggest that there are errors in the time estimates. Statistical analysis of these results for all (or a subset of) practitioners would show which services are most likely to be sources of the errors and, therefore, most in need of new time estimates.

In validating the fee schedule’s existing time estimates, it may be possible to use the data collected from the cohort of practices to develop new time estimates. If sufficient data are collected, time per unit of service could be

## CMS needs accurate and current data for determining practice expense relative value units

In addition to the time estimates for practitioner work, another set of estimates addresses the time typically spent by nonphysician clinical employees who work in practitioners' offices. These estimates are used in CMS's methodology for determining the practice expense relative value units (RVUs).<sup>7</sup> The time estimates for practice expense are based on specialty society surveys and have the same vulnerabilities as the time estimates for practitioner work.

CMS's practice expense methodology also requires data on prices for equipment and supplies used in practitioners' offices. On this issue, the Commission has a longstanding concern that CMS has yet to adopt a schedule for updating these prices (Medicare Payment Advisory Commission 2006). The Commission's view is that it is important for the agency to regularly (e.g., every two years) update these prices. Inaccurate prices, particularly of high-cost medical equipment and

supplies, can result in distortions in practice expense RVUs for different services over time. Prices for new supplies and equipment are likely to drop over time as they diffuse into the market and as other companies begin to produce them.

Most recently, in the proposed rule for the 2011 physician fee schedule, CMS outlined a process to update the prices of high-cost supplies (items with a price of \$150 or more) every two years, relying on the General Services Administration medical supply schedule. However, in the final rule, CMS did not adopt the method. Instead, the agency stated that it would continue to study the issue over the coming months.

Separately, CMS's practice expense methodology accounts for the cost of indirect inputs with data on total practice costs for each physician specialty. Beginning in 2007, CMS determined the cost of

*(continued next page)*

estimated with statistical analysis of actual hours worked as a function of units of service by HCPCS code. The estimates would show the effect that a one-unit change in services has on hours worked.<sup>8</sup>

### Is it necessary to collect time data for all services?

If it is necessary to collect service-specific data on the time practitioners spend furnishing discrete, HCPCS-coded services, the administrative burden on practices could be limited by focusing the data collection on selected services. Some services account for a relatively large share of spending. Some may be good candidates for other reasons.

- Medicare claims data show that 460 services account for 90 percent of spending under the physician fee schedule. While validation of time data for all of the more than 7,000 services may be perceived as prohibitive, any collection of service-specific data should be feasible for 5 percent to 10 percent of the services. In turn, it should be possible to consider

similarities among services and use statistical techniques to validate the time estimates for other services.

- Depending on the year, a subset of services exhibits rapid growth compared with other services. For instance, in 2009, the volume per beneficiary of certain types of spine surgery went up by more than 10 percent compared with 3 percent growth in per beneficiary volume for all practitioner services (Medicare Payment Advisory Commission 2011). Rapid volume growth may be a sign that a service's time estimate is too high and that it is mispriced.
- Some services require relatively little practitioner time. For instance, the 10th percentile of the time estimates for services in the diagnostic tests category is 11 minutes. The 10th percentile of the time estimates for imaging services is 6 minutes. Despite their time estimates, however, short-duration services can account for relatively large shares of spending because of their volume or because they have high



## CMS needs accurate and current data for determining practice expense relative value units (cont.)

indirect inputs by using practice cost data submitted by seven specialties (allergy/immunology, cardiology, dermatology, gastroenterology, urology, radiology, radiation oncology) and independent diagnostic testing facilities. Use of these data was a response to a requirement in the Balanced Budget Refinement Act of 1999, which mandated that the agency establish a process to consider more current practice cost data submitted by specialties when updating the physician fee schedule. For most other specialties, CMS used practice cost data that the American Medical Association (AMA) collected between 1995 and 1999. Using more current data for the eight specialties increased estimates of their practice costs relative to all other specialties. The concern was that selective updating of the practice cost information had distorted relative practice expense payments across services. The AMA and specialty societies then fielded a new, privately sponsored, voluntary survey—the Physician

Practice Information Survey (PPIS) to collect more current practice cost data from nearly all specialty groups. CMS supported the effort.

Beginning with the 2010 fee schedule, CMS used the more current data obtained from the PPIS. Although concerns have been raised about the PPIS's representativeness and low response rate, this survey is a step forward compared with the multiple data sources CMS previously relied on. The advantages of the PPIS are that it: (1) reflects current practice patterns and costs, (2) measures costs of nearly all physician and nonphysician specialties, and (3) uses a standard protocol for all specialty groups that was designed to derive practice expense RVUs. The concern is that CMS has not articulated a strategy for keeping the practice cost data up to date via a survey or other method. ■

intensity (high RVUs per unit of time). Thus, a small error in the time estimate for a short-duration service can represent a large proportion of the total. A 2-minute error in the time estimate for a 20-minute service (the 10th percentile of the time estimates for E&M services) is an error of 10 percent. But a 2-minute error in the estimate for an 11-minute service is an error of 18 percent, and a 2-minute error in the estimate for a 6-minute service is an error of 33 percent. High-volume, short-duration services could be considered in any collection of service-specific time data.

- CMS's estimate is that in 2008 about 2,900 services had work RVUs that dated back to the 1980s and the Harvard project on the fee schedule (Centers for Medicare & Medicaid Services 2010). These services accounted for \$5 billion in spending, or about 8 percent of the total. According to a RUC analysis, 296 of the services have an annual volume of 10,000 services or more. These services could be considered as candidates for collection of time data.

- The RUC has established a list of 316 services, known as multispecialty points of comparison (MPC), which are reference services used in the valuation of new, revised, or newly reviewed services. Recently, the RUC has undertaken a review of some MPC services. In addition, CMS has ranked services on the MPC list according to the volume of services and allowed charges and has requested that the RUC review 33 high-priority services. Given their importance, MPC services might be another category of services to consider. ■

## Endnotes

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- 1 In February 2010, the Congress passed a provision in law that allows a limited exception to rules of the Statutory Pay-As-You-Go Act of 2010 (S-PAYGO) when overriding the SGR formula. Since passage of this S-PAYGO exception, only two of the temporary SGR overrides have invoked it. The Congressional Budget Office estimated that these S-PAYGO exceptions incurred about \$3 billion dollars in spending that did not require an offset, which amounts to less than 5 percent of the total amount allowed to be excepted under the SGR S-PAYGO exception.
- 2 Payments for professional liability insurance account for the remainder of payments under the physician fee schedule.
- 3 PPACA did not include additional resources for CMS to accomplish these activities.
- 4 The method is regression analysis. We conducted five analyses, one for each type of service: E&M, imaging, major procedures, other procedures, and tests. The log of each service's work RVU was the dependent variable and the log of the service's time estimate was the explanatory variable. The proportion of variation in work RVUs explained by the regression model is the model's coefficient of determination,  $R^2$ .
- 5 In addition to influencing the estimates of nonphysician clinical staff time for some services, time estimates for practitioner work influence the allocation of indirect practice costs. Indirect practice costs are among the practice costs considered in CMS's methodology for determining practice expense RVUs. Indirect practice costs include administrative labor and office expense.
- 6 RUC-valued services—based on specialty society surveys—account for more than 90 percent of spending under the fee schedule. The remainder consists of services valued during the fee schedule research at Harvard (Centers for Medicare & Medicaid Services 2010).
- 7 In the fee schedule's method for valuing practice expense, nonphysician clinical staff are valued with time estimates (and wage rates). Administrative staff are classified as an indirect expense and are valued separately, without time estimates.
- 8 The analysis would be a regression analysis with the practitioner as the unit of observation. Hours worked would be the dependent variable. Units of service by HCPCS code would be the explanatory variables. The parameter estimates for each HCPCS code would be the change in hours worked associated with a one-unit change in the number of services. That is, the parameter estimate for each code would be a time estimate—the time spent furnishing one unit of the service.

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