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Need to Refine Practice Expense Values During Transition and Long Term

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Chairman
The Honorable Daniel Patrick Moynihan
Ranking Minority Member
Committee on Finance
United States Senate

The Honorable Tom Bliley
Chairman
The Honorable John D. Dingell
Ranking Minority Member
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House of Representatives

The Honorable Bill Thomas
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Ranking Minority Member
Subcommittee on Health
Committee on Ways and Means
House of Representatives

In 1992, Medicare began using a fee schedule to pay physicians for more than 7,000 procedures, ranging from a routine office visit to surgical removal of a brain tumor. The intent of this new payment system was to base physicians' payments on the relative resources used to provide a procedure rather than on the physicians' charges. In 1997, Medicare's physician fee schedule payments totaled about $43 billion.[1]

To develop the fee schedule, each medical procedure is ranked on a scale according to the amounts of three categories of resources used to perform the procedure—physician work, practice expenses, and malpractice expenses.[2] A fee schedule amount for each procedure is computed by multiplying the sum of the procedure's three rankings, known as relative

[1]For each procedure, Medicare pays 80 percent of the fee schedule amount and Medicare patients are responsible for the remaining 20 percent. In this report, we refer to the total Medicare fee schedule amount as the "Medicare payment." See appendix I for an overview of Medicare's fee schedule.

[2]Physician work resources are measured in terms of a physician's time, intensity of effort, level of skill required, and stress from risk of harm to the patient. Practice expenses include the costs of resources such as nonphysician personnel, equipment, supplies, and office space required to deliver a procedure.

value units (RVU), by a conversion factor that translates RVUs into dollars.[3] Before January 1, 1999, only the physician work RVUs, which account for about 55 percent of the total RVUs for each procedure, were based on the estimated resources used. Beginning this January, the practice expense RVUs, but not the malpractice expense RVUs, are now resource based. Before January, the practice expense and malpractice expense RVUs, which account for about 42 and 3 percent, respectively, of the fee schedule allowances, were still based on charges physicians submitted before the fee schedule's development. A method for calculating resource-based RVUs for practice expenses and malpractice expenses had not yet been developed at the time the Health Care Financing Administration (HCFA) implemented the fee schedule in 1992.

The Social Security Amendments of 1994 required the Secretary of Health and Human Services (HHS) to revise the Medicare fee schedule by 1998 so that the practice expense RVUs would reflect the resources used rather than historical charges.[4] While the revisions were required to be "budget neutral" so that total Medicare payments to physicians for practice expenses would not change, Medicare payments could increase for some procedures and decrease for others. Furthermore, depending upon their mix of procedures, members of different physician specialties could receive more or less in total Medicare payments.

On June 18, 1997, HCFA published a proposed rule in the Federal Register describing proposed fee schedule revisions to incorporate resource-based practice expense RVUs. A number of physicians' groups and other medical organizations questioned the data and methodology HCFA used and argued that the reallocations of Medicare payments would be too severe. Subsequently, the Congress included provisions in the Balanced Budget Act of 1997 (BBA) that delayed the resource-based practice expense revisions until 1999, provided for a 3-year phase-in of the revisions, and required HCFA to publish a revised proposal by May 1, 1998. The act also required us to evaluate HCFA's June 1997 proposed rule and report to the Congress within 6 months.[5] In response to this mandate, we issued a report in February 1998 in which we concluded that HCFA's proposed methodology was generally acceptable but needed some modifications.[6]

[3]The fee schedule allowances are also adjusted for differences in local costs using geographic practice cost indexes.

[4]Sec. 121, P.L. 103-432, 108 Stat. 4398, 4408, Oct. 31, 1994.

[5]Sec. 4505, P.L. 105-33, 111 Stat. 251, 435, Aug. 5, 1997.

[6]See Medicare: HCFA Can Improve Methods for Revising Physician Practice Expense Payments (GAO/HEHS-98-79, Feb. 27, 1998).

On June 5, 1998, HCFA published its revised proposal, which included a new methodology for developing resource-based practice expense RVUs. On November 2, 1998, HCFA published its final rule, which contains minor changes to its June 5, 1998, methodology.

This report responds to your request that we continue to monitor and report on HCFA's ongoing efforts to develop resource-based practice expense RVUs. Specifically, we focus on (1) our evaluation of whether the new methodology is an acceptable approach for revising Medicare's fee schedule; (2) questions raised about the data, assumptions, and adjustments underlying the new methodology that need to be addressed during the 3-year phase-in period; and (3) the need for future updates to the practice expense RVUs to reflect changes in health care delivery and for ongoing assessments of the fee schedule's effect on Medicare beneficiaries' access to physicians' care.

To address these issues, we reviewed HCFA's new methodology, comments from physicians' groups, and selected documentation on the data and methodology. We held several meetings with HCFA staff to understand their new methodology and the rationale behind some of their key decisions. We did not gather new data on physicians' practice expenses, test the reliability of HCFA's data, or independently verify HCFA's data sources or calculations. We also met with researchers, representatives of physicians' organizations, and others to obtain their views on HCFA's new proposal. We performed our evaluation from May through November 1998 in accordance with generally accepted government auditing standards. The physicians' groups and others that we met with are listed in appendix IV.

Results in Brief

HCFA's new methodology represents an acceptable approach for calculating resource-based practice expense RVUs. HCFA relied on the best data available for creating the new values: (1) a nationally representative survey of physicians' practice costs and (2) data developed by panels of experts that identify the specific resources associated with individual procedures. HCFA's original and new proposals use these data in similar ways to create the new RVUs. A critical difference is that the new methodology more directly recognizes the variation in practice expenses among physicians' specialties in computing the RVUs. Additionally, this methodology responds to several concerns we had with the original one.

While HCFA's new methodology is acceptable overall, certain questions about the data and underlying methodology need to be addressed before

the new RVUs are completely phased in. For example, the national practice expense survey database contains limited data for some specialties and may lead to imprecise estimates of their practice expenses. For other specialties not included in the survey database, HCFA had to use proxy information, the appropriateness of which needs to be verified. Also, HCFA made certain assumptions and adjustments without confirming their reasonableness. For example, HCFA adjusted the supply cost estimates for oncologists to avoid paying them twice for chemotherapy drugs but HCFA has not yet collected data to determine the appropriate size of the adjustment.

To address these issues, HCFA needs a strategy for refining the practice expense RVUs during the 3-year phase-in period that focuses on the data and methodology weaknesses that have the greatest effect on the RVUs. However, HCFA has done little in the way of sensitivity analysis to effectively target its refinement efforts. Additionally, HCFA has not developed permanent processes for future updates and revisions to the practice expense RVUs as new procedures are developed or methods of performing existing procedures shift. Finally, HCFA needs to continue monitoring beneficiaries' access to physicians' care to ensure that access is not compromised by past and ongoing changes to Medicare's payments to physicians. Our recommendations to HCFA focus on these issues.

Background

Physicians incur a variety of expenses in operating their practices that contribute to the costs of performing procedures. These include salary costs for nurses, technicians, and administrative staff plus spending for medical equipment, medical supplies, rent, utilities, and general office equipment and supplies. Expenses vary among practices, depending on such factors as the size of a practice, mix of specialties involved, geographic location, health care needs of the patients, and types of procedures provided.

A resource-based, relative-value payment system ranks procedures on a common scale, according to the resources used for each procedure. The need to estimate and rank practice expenses for thousands of medical procedures presents HCFA with several enormous challenges. Most physicians' practices have readily available data on their costs, such as wages for receptionists and clinical staff and the costs associated with rent, electricity, and heat. However, Medicare pays physicians by procedure, such as for a skin biopsy, so HCFA needs to estimate the portion of total practice expenses associated with each procedure—data that are

not readily available. The task is made more difficult because of the significant variations in practice expenses among individual physicians and across practice settings. For example, a physician in a solo practice is likely to have practice costs different from those of a physician in a group practice.

The effect of both problems—the difficulty in allocating practice expenses to procedures and the variation in expenses among practices—is mitigated somewhat because Medicare's fee schedule allowance for each procedure is based on the procedure's ranking relative to all other procedures. Even though the actual expenses associated with a procedure cannot be precisely measured and vary among physicians' practices, the expense of one procedure relative to another is easier to estimate and is likely to vary less across practices.

The resource-based practice expense RVUs that HCFA first proposed in 1997 and then implemented in 1999 have been the subject of widespread debate among physicians' groups. This controversy is not unexpected, since the legislative requirement that fee schedule changes be budget neutral means that some physicians' specialty groups would be likely to benefit from the changes at the expense of other groups. In other words, total Medicare practice expense payments to physicians will not change, but payments for particular procedures, and consequently for certain specialties, could change.

To moderate the effects of the expected redistributions, the BBA required that the new RVUs be phased in over a 3-year period. In 1999, the RVUs used to determine Medicare's practice expense fee schedule payments consist of 25 percent of the new resource-based RVUs and 75 percent of the charge-based RVUs. The share based on resource-based RVUs will increase to 50 percent in 2000, 75 percent in 2001, and 100 percent in 2002. Additionally, the BBA required HCFA to develop a refinement process for each year of the 3-year transition period.

Overview of HCFA's Original Methodology

HCFA's original methodology was described in a June 1997 proposed rule. An initial step was to develop estimates of the costs of the direct practice expenses associated with each procedure.[7] HCFA convened 15 clinical practice expert panels (CPEP) organized by specialty and composed of physicians, practice administrators, and nonphysician clinicians, such as

[7]Direct expenses involved resources that can be more readily assigned to individual procedures, such as nursing staff, medical equipment, and medical supplies. Indirect expenses, like office rent, are much more difficult to assign to procedures.

nurses.[8] The CPEPs estimated the type and quantity of nonphysician labor, medical equipment, and medical supplies required to perform each of more than 6,000 procedures. A HCFA contractor subsequently estimated the dollar costs of these direct expenses for each procedure.

HCFA applied a series of adjustments to these direct expense estimates. First, HCFA reviewed the data to ensure that the identified costs were allowable under Medicare policy and revised them as necessary. Next, HCFA used a statistical "linking" methodology that adjusted the estimates from different CPEPs to put them on a common scale and make them directly comparable. HCFA then adjusted the CPEP estimates so that the proportions of aggregate practice expense dollars devoted to nonphysician labor, medical equipment, and medical supplies across all specialties were consistent with national practice expense data that the American Medical Association (AMA) collects through its Socioeconomic Monitoring System (SMS) survey. The survey is administered annually to a random sample of physicians.[9] Lastly, HCFA adjusted the CPEP clinical and administrative labor estimates that appeared to be unreasonable.

In the final step in the methodology, HCFA developed a formula to allocate to individual procedures the indirect expenses associated with running a practice. Indirect expenses such as rent and utilities are difficult to associate with individual procedures; therefore, the CPEPs did not estimate these expenses for each procedure. Instead, HCFA allocated indirect expenses to procedures based on the physician work, direct practice expense, and malpractice expense RVUs associated with a procedure. Thus, procedures that ranked high in each of these three categories were assigned proportionately more indirect expenses. Additional details of HCFA's original proposal are contained in appendix II as well as in our February 27, 1998, report.

Overview of HCFA's November 1998 Methodology

HCFA's new methodology was contained in its June 1998 proposed rule and revised slightly in its November 1998 final rule. For each medical specialty, HCFA estimated the aggregate spending for categories of direct and indirect practice expenses for treating Medicare patients, using the SMS survey data and Medicare claims data. Then, using the specialty's CPEP estimates, HCFA allocated each of the direct expense totals for clinical labor, medical equipment, and medical supplies to individual procedures. To allocate the

[8]For example, one panel reviewed general surgery codes, while another reviewed orthopedic codes.

[9]This annual telephone survey is designed to provide representative information on all nonfederal physicians on a number of characteristics, including practice expenses.

indirect costs to procedures, HCFA used a combination of a procedure's physician work RVUs and direct practice expense estimates for clinical labor, medical equipment, and medical supplies.

For procedures performed by multiple specialties, HCFA computed a weighted average of the allocated expenses based on the frequency with which each specialty performed the procedure on Medicare patients. This step was necessary because HCFA's new approach created separate practice expense estimates by specialty for procedures performed by more than one specialty. However, Medicare pays the same amount for a procedure to all physicians, regardless of specialty.[10] See appendix II for a more detailed description of HCFA's revised methodology.

HCFA's New Methodology Is Acceptable for Establishing Practice Expense Relative Values

HCFA's new methodology is an acceptable approach for revising Medicare's practice expense payments. The new methodology has much in common with HCFA's original methodology. For example, both approaches use the SMS data to establish aggregate practice expense spending estimates, or cost pools, for different types of costs, and both approaches use the CPEP data to identify the specific resources associated with individual procedures and to allocate costs to them. Further, the new methodology explicitly recognizes differences in practice expenses among specialties. Although several physicians' groups have criticized the new methodology for not being resource-based, their view is not shared by others.

The New Methodology Uses Best Available Data in Ways Similar to HCFA's First Methodology

HCFA's revised methodology uses what are generally recognized as the best available data for creating resource-based practice expense values—the SMS annual survey data and the CPEP data. The annual SMS survey data are responses from a randomly selected, nationwide sample of several thousand physicians. Although other practice expense surveys are conducted by different organizations, they are not nationally representative and thus are inappropriate for developing resource-based practice expense values. To obtain more accurate information, a practice expense summary form is mailed to physicians in advance of the SMS survey so that physicians are better prepared to answer the practice expense questions. The CPEP data are the only data available that identify the specific resources used to deliver individual procedures.

[10]The outcome of this weight averaging is a single dollar amount for each procedure that is used to rank procedures. HCFA converted the rankings into practice expense RVUs, which it then converted to the Medicare fee paid for a procedure.

HCFA's new and original methodologies used these two data sources for similar purposes. Both used the CPEP data to identify the specific resources associated with individual procedures. Further, both methodologies used the SMS data to determine the distribution of total practice expense dollars among different types of costs. However, there were some key differences, in particular the recognition of differences among specialties, in how the two methodologies used the data. Under the original method, HCFA used the SMS data to create an aggregate cost pool for each type of direct expense. Under the new method, HCFA created a separate pool for each type of direct and indirect expense for each medical specialty.

The Revised Methodology Incorporates Several Positive Changes

There are several other significant differences between the two methodologies. By creating separate practice expense cost pools for each specialty that are based on the SMS data, HCFA's revised methodology explicitly maintains relative differences among specialties in their total practice expenses for labor, equipment, supplies, and other expenses. For example, SMS data indicate that ophthalmologists' practice expenses are $132 per hour while those of general surgeons are $54 per hour. These figures include $9 per hour in equipment expenses for ophthalmologists and $2 per hour for general surgeons. HCFA's earlier methodology included certain adjustments that would not have maintained such differences.

HCFA's revised methodology is also more straightforward and easier to understand than HCFA's first proposal, a belief shared by many of the physicians' groups we contacted. For example, in its original methodology, HCFA used a complex statistical model to adjust the CPEP estimates, an adjustment we criticized in our earlier report because it contained technical weaknesses that may have biased the estimates. The new methodology no longer contains this adjustment and eliminates other controversial steps in HCFA's first proposal that we criticized. Further, the new method treats administrative labor as an indirect expense; this is consistent with our February 1998 recommendation that HCFA consider reclassifying administrative labor from a direct to an indirect expense.

Some Groups Question Whether HCFA's New Approach Is Resource-Based

The American Academy of Family Physicians, the American College of Physicians-American Society of Internal Medicine, and the American Society of Clinical Oncology believe that HCFA's revised approach for establishing practice expense RVUs is not resource-based. They note that specialties whose procedures may have been overvalued under the charge-based system will continue to benefit under the new methodology.

Such specialties, they believe, have had greater revenues and therefore have had more money to spend on their practices. They believe, consequently, that specialties that perform overvalued procedures are likely to have incurred some unnecessary costs and to have inflated cost pools reflected in the SMS data, while other specialties will be disadvantaged as their relative costs will be underestimated. They also note that HCFA's final rule says that HCFA believes that this issue of historical differences in payment should be discussed during the refinement period.

These physicians' groups believe that HCFA should use its original method because it resulted in relative values similar to those previously estimated by the Physician Payment Review Commission and others.[11] Compared with its original method, the RVUs developed under HCFA's current method would result in smaller redistributions among specialties. For example, HCFA estimates that practice expense payments to general practitioners under its original methodology would be 7 percent greater over a 4-year period than under the prior charge-based methodology, while such payments would be only 4 percent greater under its revised methodology. Payments to cardiac surgeons would be reduced by 30 percent under the original methodology or more than twice the 12-percent reduction under the revised methodology. Of the $18 billion Medicare spent on practice expense payments in fiscal year 1997, $2 billion would have been distributed differently across specialties if the original approach had been in effect—$500 million more than under the new methodology.[12]

Some economists and physicians' groups, however, note that physicians work in a competitive environment that is subject to market pressures, such as managed care contracting, and contend that physicians seek to maximize their income by minimizing costs. This argument would lead to the conclusion that if Medicare has historically overpaid some specialties, the overpayments would be reflected in higher net incomes for those specialties rather than higher expenses.

While neither position can be conclusively verified, we believe that the use of incurred costs, as reported on the SMS survey, is consistent with traditional cost accounting practices. Traditional cost accounting does not normally involve determining the efficiency of the costs to produce a

[11]The Physician Payment Review Commission advised the Congress on health care policy issues and was replaced by the Medicare Payment Advisory Commission in October 1997.

[12]This $18 billion figure includes beneficiary copayments for procedures performed by physicians.

service. Making such a determination with accuracy would be very difficult.

Concerns About Data and Methodological Issues Can Be Addressed During the Phase-in Period

Even though HCFA used the best available data and developed a generally acceptable methodology for establishing practice expense RVUs, specific questions about both the data and methodology need to be reviewed and addressed, a position supported by virtually all the physicians' groups we contacted. The data contain certain weaknesses such as small sample sizes. The methodology includes some assumptions and adjustments that have not been validated. Many of these issues can be addressed during the 3-year implementation period and will result in modifications to the final RVUs in 2002; others will require efforts by HCFA over a longer term.

Data Sources Are Imperfect but Can Be Improved

Readily available alternatives to the SMS and CPEP data do not exist. The SMS survey provides nationally representative data on practice expenses, while the CPEP data are the only data available on practice expenses that identify the specific resources associated with individual procedures. Nevertheless, limitations with both data sources for creating resource-based practice expense RVUs need to be overcome. As described below, workable options are available for many of these issues.

Limitations and Refinement of the SMS Data

The AMA, many physicians' groups, and the Medicare Payment Advisory Commission (MedPAC) identified three basic limitations with the SMS data. First, response rates to the practice expense questions on the SMS survey tend to be low—about 40 percent—compared with the overall survey response rate of about 60 percent. This reduces the sample sizes and can bias the data if the expenses of physicians who failed to respond to the survey are not comparable to the expenses of those who did. Second, the sample sizes for some specialties either are too small to permit separate calculations of practice expense cost pools or result in relatively imprecise estimates.[13] Third, the SMS data represent a physician's portion of a group's practice expenses. Because HCFA's methodology is based on calculating practice expenses per hour for each physician respondent's practice, HCFA had to make a number of assumptions about the data. For example, HCFA assumed that all physician owners in a group practice had the same practice expenses as the physician respondent. To the extent that these assumptions are not true, the practice expense cost pools are inaccurate. This assumption may be particularly problematic for multispecialty

[13]Estimates are less reliable when the sample size or number of respondents is small.

practices in which physicians within the same practice but from different specialties may have different practice expenses.[14]

Some of these limitations with the SMS data can be addressed during the 3-year phase-in period. To determine whether the SMS data are subject to nonresponse bias, for example, HCFA could (1) compare the characteristics of respondents and nonrespondents to the SMS survey or (2) compare the characteristics of respondents to a comparable external data source.[15] HCFA could then evaluate the need for corrections. HCFA has not yet conducted analyses to determine if nonresponse bias is an issue with the SMS survey, but its new rule indicates the agency's willingness to review and refine the data.

Increasing the SMS sample and redesigning some of the questions would help address other known limitations but would most likely not result in improvements during the phase-in period. The limitations associated with small sample sizes can be addressed in future SMS surveys of physicians' practice expenses. In fact, HCFA identified working with the AMA to improve the SMS survey as one of its most important tasks during the 3-year phase-in period. In future SMS surveys, for example, more physicians could be contacted, thereby providing HCFA with larger sample sizes for developing specialties' practice expense cost pools. This approach, however, would involve decisions as to how many additional physician responses are needed and who would pay for the additional survey costs.

It is not clear whether HCFA will use the results from future SMS surveys to refine and adjust the practice expense RVUs. HCFA officials expressed skepticism about doing so because they fear that physicians might inappropriately inflate their reported practice expenses. This could result in some specialties' increasing their practice expense cost pools, with proportional reductions in cost pools for other specialties since all adjustments must be budget neutral. However, there are ways to test for such bias. For example, AMA representatives told us that comparisons with earlier years' responses could indicate areas for further review where

[14]On the basis of the SMS data, the AMA compared the practice expenses per hour for more than 25 specialties, with and without including physicians from multispecialty practices included in the calculations. For most specialties, the total practice expenses per hour differed by no more than 2 percent when physicians from multispecialty practices were excluded. For a few specialties, however, excluding these physicians resulted in an increase of up to 8 percent or a decrease of up to 16 percent in their practice expenses per hour.

[15]Representatives from the Medical Group Management Association (MGMA), for example, believe that their member survey could be used to validate the SMS data. This 12-page survey instrument asks members for information on their practice's current assets and liabilities; operating costs; total number of patients treated in a year; and percentage of income from Medicare, Medicaid, and managed care plans.

physicians might be trying to manipulate their responses. In its final rule, HCFA suggested that future SMS survey data for a specialty that showed significant changes from earlier surveys be selectively audited. However, AMA representatives were concerned that auditing future SMS results might discourage physician participation in the survey; they suggested that less formal types of validation might be more productive, such as conducting follow-up telephone calls with physicians to explore their answers and to ensure that they understood the questions.

Rather than collecting practice expense data about individual physicians, which prompted HCFA to make certain assumptions about the data, future surveys could capture practice expenses about all physicians in a practice. The AMA plans to develop a new survey instrument for this purpose. AMA representatives said that they may pilot-test this survey in 2000 and alternate it with a survey of individual physicians every other year. Results from the survey of all physicians in a practice would likely not be available to HCFA until after the 3-year phase-in period ends.

Limitations and Refinement of the CPEP Data

HCFA used the CPEP data to allocate the practice expense cost pools to individual procedures because the CPEP data are the only data that allow this. Some physicians' groups, however, have criticized these data as representing merely the "best guesses" of physicians and other panel members. They have also criticized the CPEPs for (1) not being representative of the different practice settings or types of physicians who provide particular procedures and (2) using different assumptions and definitions, leading to differences in the resources identified by different panels for the same procedures.

As we noted in our February 1998 report on HCFA's first proposal, the use of expert panels is an acceptable method of developing procedure-specific practice expense data. We explored other primary data gathering methods and concluded that each has practical limitations. However, we reported that it is important for HCFA to refine and validate these data. We noted that collecting actual data on key procedures from a limited number of physicians' practices through surveys or on-site reviews during the 3-year phase-in period would enable HCFA to assess the CPEP data and identify needed refinements.

Assumptions and Adjustments in HCFA's Methodology Need to Be Validated During Refinement

HCFA's revised methodology includes certain assumptions and adjustments that were prompted by limitations in the available data relative to the difficult task of estimating and ranking practice expenses for thousands of medical procedures. Such assumptions and adjustments should be reasonable and supported by data as much as possible. In some cases HCFA has taken steps to review the reasonableness of different assumptions and adjustments but in other cases it has not. Several examples are presented below to illustrate the kinds of assumptions and adjustments HCFA will need to review during the 3-year phase-in period; others are discussed in appendix III.

Because Medicare pays separately for chemotherapy drugs provided by oncologists, HCFA adjusted their medical supply cost pool to prevent duplicate Medicare payments.[16] Oncologists reported medical supply costs of $87 per hour in the SMS survey, compared with an average of $7 for all physicians. Since the SMS supply data include drug costs, HCFA officials believed that the $87 per hour figure includes the cost of chemotherapy drugs paid separately by Medicare.[17] HCFA therefore used the average for all specialties in computing the oncologists' medical supply cost pool to avoid duplicate payments for these drugs. Oncologists acknowledged that the costs of chemotherapy drugs are included in the SMS survey but argued that HCFA's adjustment was too large because oncologists incur higher supply costs than the average physician.

In this case, HCFA has conducted a limited analysis to determine the reasonableness of its adjustment to the SMS data. First, HCFA calculated the oncology supply cost pool based on the $87 supply cost per hour. HCFA then compared that cost pool with the payments Medicare made to oncologists for drug reimbursement. HCFA found that the drug reimbursement significantly exceeded the supply costs that oncologists reported on the SMS. Although this analysis did not determine what portion of the $87 is attributable to drug costs, it does indicate that HCFA's adjustment is a reasonable starting point. However, more data are needed to determine the appropriate adjustment. During the phase-in period, HCFA plans to conduct a more complete analysis of oncologists' actual drug and supply costs.

[16]HCFA made similar adjustments to the SMS data for allergists and immunologists.

[17]While Medicare generally does not pay for self-administered drugs, the Congress has enacted legislation to provide Medicare coverage of some self-administered drugs, such as certain oral chemotherapy drugs and antiemetic drugs.

HCFA made other adjustments or assumptions for which it has yet to gather supporting data. For example, to estimate the practice expenses per hour for specialties not included in the SMS survey, HCFA used the SMS data from proxy specialties. Since the SMS survey does not separately identify hand surgeons, HCFA assumed that their practice expenses are the same as those of orthopedic surgeons, whose SMS data HCFA used in determining the practice expense cost pools for hand surgeons. Whether hand surgeons and orthopedic surgeons have similar practice expenses is not known.

Expected Medicare payments for some specialties not included on the SMS survey differ greatly between HCFA's two proposals but it is not known which method produces the better estimates. For example, in its revised methodology HCFA used the practice expenses of general internists as a proxy for calculating the practice expenses for chiropractors. On the basis of HCFA's estimates, chiropractors could expect an 8-percent reduction in their Medicare payments under HCFA's final rule whereas they expected a 14-percent increase under HCFA's first proposed rule. Such discrepancies may indicate a problem in using some specialties as proxies for others. Additional review and analysis could help validate HCFA's practice expense per hour assumptions for specialties not included on the SMS survey. HCFA noted in its final rule that it will work with all specialties not represented in the SMS survey to ensure that appropriate data are used to calculate their practice expense RVUs.

Other HCFA assumptions and adjustments warrant reexamination. For example, HCFA used physician work RVUs in allocating indirect expenses to procedures—a method supported by MedPAC staff and some physician groups. However, physician work RVUs reflect not only the level of skill physicians require to deliver a procedure but also their stress from risking harm to their patients—measures not generally associated with practice expenses. The time a physician requires to perform a procedure may be a better measure of the indirect expenses associated with that procedure. For example, utility expenses should not differ between two office-based procedures that require the same amount of a physician's time but have different stress levels. In its final rule, HCFA acknowledged that using the physician work RVUs as an indirect expense allocator has shortcomings.

The Most Critical Issues Need to Be Identified and Addressed During the Phase-in Period

It is important that HCFA develop a plan for ensuring that the most critical issues associated with the new methodology and data are addressed first. HCFA should base its decisions about which issues to address first on sensitivity analyses that would allow it to evaluate the effects of various

adjustments to the methodology and data and focus on those that have the greatest effect on the new practice expense RVUs. Using resources to examine fully those that have very limited effects may be inefficient. HCFA has done little in the way of conducting such analyses and therefore does not know where to most effectively target its refinement efforts.

Another issue of particular importance concerns whether HCFA will use supplemental practice expense data provided by individual medical specialties to revise the practice expense cost pools. Physicians' groups believe that there may be circumstances in which alternative data are more representative and accurate than the SMS data and therefore should be used to supplement the SMS data. The Society of Thoracic Surgeons, for example, recently submitted additional practice expense data to HCFA that are based on surveying an additional number of thoracic surgeons during the 1998 SMS survey than would normally be contacted. The Society believes that HCFA should use these new data, along with the prior SMS data, to recalculate thoracic surgeons' cost pool.

HCFA officials told us that they will be cautious about using alternative data sources because of their potential bias. Alternative data also may not be compatible with the SMS data, as HCFA found with data recently submitted by some specialties. HCFA officials said that they would be willing to base their refinement of a specialty's practice expense cost pool on alternative data if there is compelling evidence that the SMS data are inaccurate or not representative. It may be most appropriate, for example, to use additional or alternative data for specialties with small SMS sample sizes or for specialties whose cost pools were based on practice expenses of other specialties.

In deciding whether to use data from other sources to augment the SMS data, HCFA will need to carefully review the data. HCFA must be assured that the data are reasonable and compatible, are collected from a representative sample of physicians who work in various settings, and are not biased. One way to help ensure data compatibility is to use a common survey instrument and methodology to collect the data. Further, specialties that do not conduct their own studies could be disadvantaged by studies that result in redistributing Medicare funds from one specialty to another. Consequently, HCFA officials said that before accepting data from other sources they (1) would like to have the data selectively audited by an independent entity and (2) need to establish a process allowing specialty societies to comment on proposed changes to their practice expense cost pools resulting from using the new data.

Refinement of the CPEP data is another area where HCFA may be assisted by outside resources during the phase-in period. HCFA twice attempted to refine these data by convening panels of physicians but neither attempt succeeded.[18] Given this experience, HCFA is considering other options, such as using AMA's Specialty Society Relative Value Scale Update Committee (RUC) to refine the CPEP data.[19] The RUC is a panel of physicians representing multiple specialties and is experienced in reaching consensus on difficult physician payment issues affecting many different specialties.

To help HCFA refine the CPEP data, the RUC has decided to form a Practice Expense Advisory Committee that will review comments on code-specific CPEP data received by HCFA. The advisory committee will consist of both physicians and nonphysicians, such as nurses and practice administrators. As currently conceived, the advisory committee will submit its recommendations to the RUC for review and the RUC will make final recommendations to HCFA. Further, plans call for the advisory committee to develop recommended CPEP-like data on the estimated resources for codes that were established between 1996 and 1998 and those that will be established in 1999. HCFA does not have CPEP data for these codes because they were not in use when the CPEPs met.

In its final rule, HCFA stated that it may use contractors to provide it with advice on how to deal with the many technical and methodological refinement issues it faces during the refinement period. HCFA still needs to define the process and organizational structure it will use to seek this advice. MedPAC staff emphasized that HCFA needs to create clearly defined, step-by-step refinement processes that involve public comment and review. This should result in a coordinated, defined effort, they said.

[18]HCFA convened validation panels to review, and revise as necessary, the CPEP estimates for several hundred procedures. These panels were able to reach consensus on about 200 procedures. Significant disagreement remained on administrative labor estimates, but these estimates are not used in HCFA's current approach. HCFA also convened a cross-specialty panel to standardize CPEP staff time estimates for some administrative tasks and the clinical staff types for similar services. However, the panelists were reluctant to make any major modifications in the estimates for the services performed by their specialties.

[19]The RUC was created in 1991 and makes recommendations to HCFA on the physician work relative values to be assigned to new or revised procedure codes. It is composed of physicians' representatives from more than 25 medical specialties.

Processes Needed for Updating Practice Expense RVUs and Monitoring Fee Schedule Effects

HCFA also needs a plan for making ongoing updates to the RVUs; new codes are added to the fee schedule each year, and these codes must be assigned practice expense RVUs. Further, the RVUs need to be revised to reflect changes in how procedures are delivered and changes in practice patterns. Finally, it is essential that HCFA continue monitoring indicators of beneficiaries' access to physicians' care to determine whether access is compromised by changes to Medicare's physician fee schedule payments.

Virtually all the physicians' groups we met with support HCFA's use of the RUC to address ongoing updates to the practice expense RVUs. HCFA has not yet decided upon a permanent process for assigning practice expense RVUs to new procedures or revising the RVUs for existing procedures, but its final rule mentions the potential for the RUC to be involved in these issues in the future.

The RUC has been proactive on this topic and has proposed to HCFA that it develop practice expense RVUs for new and revised procedures implemented in 2000 and beyond. The RUC said that it would seek input from nurses, practice managers, and others who have expertise in physicians' practice expenses. Physicians' group representatives and HCFA officials believe that it is important to have these other experts involved in developing the practice expense RVUs because they may be more knowledgeable about practice expense than physicians.

A periodic, comprehensive review and update process is needed because the Medicare statute requires the Secretary of HHS to review the relative values for all physician fee schedule procedures at least once every 5 years. Since the practice expense RVUs become final in 2002, HCFA will need to review them before 2007. Even though HCFA has said that it is hesitant about using future SMS surveys to refine the practice expense RVUs during the phase-in period and has no plans to use AMA's survey of practices' total expenses, it may wish to use such data in the periodic 5-year review. The RVUs must reflect the ongoing technological changes in medicine, as well as the changes in how physicians practice; future surveys would provide HCFA with this necessary information. Additionally, HCFA may need to recalculate the costs of equipment and supplies associated with procedures using new cost data.

Finally, it is important for HCFA to continue monitoring beneficiaries' access to care, given the changes in what Medicare pays physicians. Since Medicare began paying physicians on the basis of a national fee schedule, HCFA has monitored indicators of beneficiaries' access for adverse

consequences. For example, HCFA surveys beneficiaries annually and modified its 1998 survey to further clarify access problems beneficiaries may have been experiencing. Based on these analyses, beneficiaries' access to care has remained good since the fee schedule's implementation.

However, some medical specialties whose Medicare payments were reduced as other components of the fee schedule were implemented could experience further reductions under HCFA's proposed changes in the practice expense RVUs. For example, between 1992 and 1996, cardiologists, gastroenterologists, and pathologists experienced Medicare payment reductions of 9, 8, and 9 percent, respectively. Under the new practice expense payments, these specialties face additional expected payment reductions of 9, 15, and 13 percent, respectively. Such cumulative payment reductions could affect physicians' willingness to care for Medicare beneficiaries. Non-Medicare patients too could experience changes in their access to physicians' services resulting from changes in Medicare's payments; many private payors and Medicaid programs base their payments to physicians on Medicare's fee schedule. It is important, therefore, to continue to monitor beneficiaries' access to physicians' services, paying particular attention to the specialties that are most adversely affected by changes in the fee schedule. Recognizing this, HCFA told us that the next HHS report to the Congress addressing changes in access to care will examine, to the extent possible, access indicators for the procedures with the greatest cumulative reductions in Medicare fees.[20]

Conclusions

The Medicare physician fee schedule replaced a payment system that was criticized for providing more generous payments for some services than others relative to the actual resources needed to provide them and, as a result, for promoting an inappropriate allocation of medical services. The new system, based on resource-based RVUs, is intended to ensure appropriate payment for physicians' services relative to one another, based on the resources needed to provide the services.

However, this payment model has not been easy to implement. Estimating and ranking practice expenses for thousands of medical procedures is inherently difficult and imprecise. HCFA's new methodology represents a reasonable starting point for creating resource-based practice expense RVUs. It uses the best available data for this purpose and explicitly

[20]The Secretary of HHS is required by the Social Security Act, as amended, to monitor and report annually to the Congress on a number of health care issues, including changes in access to care by population groups, geographic areas, and types of services.

recognizes specialty differences in practice expenses. It also eliminates certain adjustments to the CPEP estimates that we questioned in HCFA's original methodology.

In either methodology, HCFA is faced with using less than perfect data that need to be refined over the phase-in period. Although the SMS and CPEP data provide a solid foundation for creating resource-based practice expense RVUs, both have their limitations. The new practice expense RVUs should be based on the most accurate and reliable data possible. It is, therefore, important for HCFA to use options that improve these data. It is also important for HCFA to collect and analyze additional data that would enable it to validate or, where necessary, alter the assumptions and adjustments underlying its revised methodology. Additionally, during the phase-in period, HCFA has the opportunity to review and possibly revise some of its policy-related assumptions and adjustments, such as using physician time rather than physician work RVUs, in its indirect expense allocation calculations.

It is important that HCFA make effective use of its resources in the short term to validate and improve the practice expense RVUs. HCFA does not yet have a plan for identifying the issues that have the greatest effect on the new RVUs. Sensitivity analyses would provide HCFA with this critical information so that it can decide where to target its corrective actions most effectively. In addition, for the longer term, HCFA needs to specify processes for updating the practice expense RVUs. Processes are needed for assigning practice expense RVUs to new procedures, revising the RVUs to reflect changes in how current procedures are performed, and providing for a review of the resource-based practice expense RVUs at least once every 5 years.

Beneficiaries' access to care will be a key measure of physicians' acceptance of the new practice expense payments. How physicians respond to changes in their payments is unknown, but HCFA should continue to monitor indicators of beneficiary access to care. Such monitoring is crucial to ensure that Medicare's payments to physicians are adequate to maintain beneficiaries' access to care.

Recommendations

We recommend that the Administrator of HCFA

- Use sensitivity analysis to identify issues with the methodology that have the greatest effect on the new practice expense RVUs and to target

additional data collection and analysis efforts. One clear example of where HCFA should evaluate different policy options for revising the methodology is in the use of physician time, instead of physician work, to allocate indirect expenses.

- Develop plans for updating the practice expense RVUs that address how to (1) assign practice expense RVUs to new codes, (2) revise the RVUs for existing codes, and (3) meet the legislative requirement for a comprehensive 5-year review of the resource-based practice expense RVUs.
- Monitor indicators of beneficiaries' access to care, focusing on procedures with the greatest cumulative reductions in Medicare payments, and consider access problems when evaluating the physicians' payment system.

Agency Comments and Our Evaluation

We provided HCFA with a draft of this report and received written comments in response. We also gave copies of the draft to representatives of physicians' groups, a medical group we contacted during our work, and MedPAC; they provided us with oral comments. The following summarizes the comments and our responses.

HCFA

HCFA concurred with each recommendation and said that it was pleased that we found HCFA's revised methodology for creating resource-based practice expense values to be a reasonable starting point. HCFA agreed that it needs to set priorities and target its refinement efforts on issues having the greatest effect but did not say how it would select its targets for refinement. We believe that a systematic approach to establishing refinement priorities, such as would be afforded through sensitivity analysis, would be an effective tool for evaluating refinement options.

In its comments, HCFA said that it has plans to obtain contractor support and other independent advice on the broad methodological issues it faces. Further, HCFA noted that the Secretary of HHS is required by legislation to monitor and report annually to the Congress on a number of health care issues, including access to care. HCFA said that the next HHS report will, to the extent possible, examine access to care indicators for procedures with the greatest cumulative reduction in Medicare fees. We included these points in our report.

HCFA also provided us with technical comments, which we incorporated where appropriate. HCFA's comments appear in appendix V.

Comments From Representatives of Physicians' Organizations and Others and Our Response

Regarding HCFA's revised approach for developing resource-based practice expense payments, representatives from the Practice Expense Coalition said that they were pleased that we support HCFA's revisions. They believe that the new methodology more effectively recognizes differences in practice expenses among physician specialties. Representatives from several other physicians' groups, including the American College of Physicians-American Society of Internal Medicine and the American Academy of Family Physicians, however, said that the new methodology is not resource-based in that it reflects some unnecessary expenses that have resulted from historical differences in practice expense payments. MedPAC staff too said that there may be historical payment bias in the data.

We revised our report to better reflect these concerns and now note that HCFA will accept comments on the issue of historical payment differences during the 3-year refinement period. We continue to believe, however, that HCFA's new methodology is resource-based; it uses the best available data to rank procedures on a common scale according to the resources used. Further, trying to determine and measure the extent to which certain procedures may have been overvalued would be very difficult; doing so would also be inconsistent with traditional cost accounting practices that do not measure the efficiency with which costs are incurred in providing a service.

Representatives from MedPAC, AMA, and many other physicians' groups further asserted that we understated the differences between HCFA's original and revised methodologies. We clarified the report by adding more information about how the two methodologies differ.

Representatives from the Practice Expense Coalition said that we understated HCFA's refinement workload by not discussing all the refinement issues HCFA discusses in its final rule. We believe that our report focuses on the major refinement issues HCFA faces in the coming 3 years. While we recognize that the report does not cover all refinement issues, we do not believe that this is necessary. We use certain issues to illustrate the types of refinement tasks facing HCFA and the need for HCFA to develop processes for addressing these issues. Additionally, certain refinement issues that some suggested we include in our report, such as the base year to be used for calculating the new practice expense RVUs, the

behavioral offset, and site of service differentials, were outside the scope of our work.[21]

AMA and American College of Physicians-American Society of Internal Medicine representatives suggested that we more clearly explain the benefits and limitations we identified with the CPEP data in our first report on physician practice expense payments. We have added some material from our earlier report in response to this suggestion.

Society of Thoracic Surgeons and AMA representatives agreed with us that it is very important for HCFA to decide what, if any, data HCFA will accept from medical societies to revise or supplement the SMS data. Representatives from the American College of Physicians-American Society of Internal Medicine suggested that the RUC develop standards for medical societies to follow when conducting future practice expense surveys. They believe that the RUC is the appropriate body to serve this role and that the RUC can critically analyze survey results as it now does for development and review of the physician work RVUs. As we note in our report, it is important for HCFA to be assured that any data it uses to augment the SMS data be reasonable, compatible, and otherwise not biased.

Representatives from MedPAC, AMA, and two other physicians' groups questioned our recommendation that HCFA evaluate using physician time, instead of physician work RVUs, for allocating indirect expenses to procedures. MedPAC staff support using physician work RVUs because they believe that indirect costs should be distributed in proportion to all inputs to a procedure—physician time as well as the inputs of nonphysician staff plus the equipment and supplies used. Representatives from MedPAC, AMA, and several physicians' groups said that they are concerned about the accuracy and reliability of the physician time data. Further, representatives said that physicians have a better understanding of, and greater confidence in, the physician work RVUs.

We continue to believe that HCFA should evaluate using physician time as an indirect cost allocator. As explained earlier in the report, physician work RVUs include measures not generally associated with practice expenses, such as the stress on the physician to perform a procedure. Conversely, indirect expenses, such as utility costs and rent, will vary depending upon the amount of physician time associated with a

[21]Behavioral offset refers to reductions in payment rates to offset changes in the volume of services as physicians and other health care providers respond to a change in fees. Site of service differential refers to the reduction in the amount paid when some services are performed in a hospital outpatient department or setting other than the physician's office.

procedure. Moreover, physician time is used in calculating procedures' physician work RVUs.

Representatives from the American College of Physicians-American Society of Internal Medicine and the American Academy of Family Physicians suggested that we expand our recommendation on monitoring beneficiaries' access to care to include monitoring increases in beneficiaries' use of services. We did not modify our recommendation because we believe that HCFA's current research on beneficiary access already includes several components that would indicate increases in access.

An AMA representative said that our discussion of beneficiary access to care should note that the effects of the Medicare fee schedule go beyond Medicare since many private payers and Medicaid programs set their fees on Medicare's payments. We noted this in the report.

The physicians' groups differed on whether HCFA should include the costs of staff who accompany physicians to the hospital when calculating the practice expense RVUs. Representatives from the American College of Physicians-American Society of Internal Medicine and the American Academy of Family Physicians believe that these costs should be excluded and noted that we agreed in our first report that HCFA appropriately excluded these costs from the CPEP data since Medicare pays for these expenses through other mechanisms. Representatives from the Practice Expense Coalition and American College of Surgeons said, however, that they do not believe that these costs represent double payment by Medicare and that these costs therefore should be included in HCFA's calculations.

We believe that taking the cost of these staff out of the CPEP estimates was appropriate under HCFA's original methodology to avoid double payments by Medicare for these costs. Also, these costs were separately identifiable. Under HCFA's revised methodology, avoiding double payments for these costs would require taking them out of the SMS data, which would be difficult since these costs are not separately identified. Therefore, as we state in the report, we believe that the most appropriate initial step is for HCFA to conduct sensitivity analysis to determine if including these costs significantly affects the RVUs.

As agreed with your offices, we are sending copies of this report to the Secretary of HHS, the Administrator of HCFA, interested congressional

committees, physicians' organizations, and others who are interested. We will also make copies available to others upon request.

This report was prepared by Robert Dee, Patricia Spellman, and Michelle St. Pierre. Please call me at (202) 512-7114 or William Reis, Assistant Director, at (617) 565-7488 if you have any questions.

William J. Scanlon
Director, Health Financing
and Public Health Issues

Contents

Abbreviations

AMA	American Medical Association
BBA	Balanced Budget Act of 1997
CPEP	clinical practice expert panel
CPT	Current Procedural Terminology
GPCI	geographic practice cost index
HCFA	Health Care Financing Administration
HHS	Department of Health and Human Services
MedPAC	Medicare Payment Advisory Commission
MGMA	Medical Group Management Association
MVPS	Medicare Volume Performance Standard
PPRC	Physician Payment Review Commission
RUC	Relative Value Scale Update Committee
RVU	relative value unit
SMS	Socioeconomic Monitoring System
SGR	sustainable growth rate

Overview of Medicare's Fee Schedule

Efforts to reform Medicare's payments to physicians began in the 1980s and were prompted by concerns about increasing program costs and flaws in the existing methods for reimbursing physicians. Medicare's spending for physicians' expenses per beneficiary had been growing at almost twice the rate of the gross national product. At the time, Medicare reimbursed physicians through the "customary, prevailing, and reasonable charge" system, but this payment system was criticized because it resulted in widely varying payments for the same service and contributed to inflation in Medicare's expenditures. Concern was also raised that the payment levels favored surgical services at the expense of primary care services, resulting in distorted financial incentives. Limits on actual charges and a series of freezes and reductions in payment levels for particular services made the system increasingly complex.

The Consolidated Omnibus Budget Reconciliation Act of 1985 required the Secretary of the Department of Health and Human Services (HHS) to study and report to the Congress on a resource-based relative value scale system for reimbursing physicians for their services.[22] Such a system ranks services on a common scale according to the resources used in providing them. Payment for a service depends upon its ranking; services with a high ranking receive greater payment than those with a low ranking. In its 1989 report to the Congress, the Physician Payment Review Commission (PPRC) recommended that a resource-based, relative-value scale system be adopted.

The Omnibus Budget Reconciliation Act of 1989 mandated that Medicare implement an approach based on relative value that accounted for three components of costs—physician work, practice expense, and malpractice expense.[23] The system was to be phased in over 5 years beginning in 1992. Implementation was to be budget neutral, meaning that aggregate payments could not be higher than they would have been if the payment system had not changed. The legislation also required the adjustment of each component of the fee schedule to reflect geographic differences in costs, the elimination of specialty-specific payment differentials for providing the same procedure, the implementation of a process for calculating the annual payment update, and the establishment of volume performance standards to track changes in the volume or intensity of procedures Medicare pays for. Health Care Financing Administration (HCFA) contractors at the Harvard School of Public Health had developed a resource-based physician work component for the new system, but

[22]Sec. 9305(b), P.L. 99-272, 100 Stat. 82, 192, Apr. 7, 1986.

[23]Sec. 6102, P.L. 101-239, 103 Stat. 2106, 2171, Dec. 19, 1989.

methods for calculating resource-based relative values for practice and malpractice expenses had not been developed at that time.

General Components of Fee Schedule Payments

Each procedure included on Medicare's physician fee schedule is assigned a relative value that is the sum of the relative value units (RVU) for the three cost components—physician work, practice expense, and malpractice expense. The RVUs reflect the resources used to provide that procedure relative to other procedures. In other words, a procedure with more RVUs uses more resources than a procedure with fewer RVUs. The RVUs are converted to a dollar payment using a monetary conversion factor. The product of the RVUs and the conversion factor is the Medicare physician fee schedule payment. Before the Balanced Budget Act of 1997 (BBA), there were three different conversion factors—one for surgical services, one for primary care services, and one for other services. The BBA created a single conversion factor for all services starting in 1998.[24]

Before the BBA, the conversion factors were updated annually on the basis of expected increases in physicians' incomes and the costs of operating a medical practice.[25] The update for each conversion factor was itself adjusted on the basis of a comparison of the actual growth in Medicare's expenditures with expected growth as estimated by the Medicare Volume Performance Standard (MVPS). The MVPS target was based on such factors as the projected growth in Medicare payments and the enrollment and aging of Medicare patients, and it was used to restrain growth for spending on physicians' procedures. In other words, if Medicare's expenditures grew more quickly than expected, the next year's updates for the conversion factors were reduced accordingly. The BBA required a new method to adjust the conversion factor update beginning in 1999, when the MVPS was replaced with a cumulative sustainable growth rate based on the growth of the real gross domestic product.[26] The cumulative sustainable growth rate (SGR) operates in a similar manner as the MVPS and is used to restrain growth for spending in physicians' procedures. The SGR is based on the estimated growth in payments for all physicians' services, beneficiaries enrolled in the Medicare fee-for-service program, real gross domestic product per capita, and expenditures for all physicians' services that result from changes in statutes and regulations.

[24]Sec. 4501, P.L. 105-33, 111 Stat. 251, 432, Aug. 5, 1997.

[25]The Medicare Economic Index was used as a proxy for the annual growth in physicians' practice expenses.

[26]Sec. 4503, P.L. 105-33, 111 Stat. 251, 433, Aug. 5, 1997.

The fee schedule payments also reflect geographic variation in input prices because the physician work, practice expense, and malpractice expense RVUs are each adjusted by a geographic practice cost index (GPCI). Each of the GPCIs—the cost-of-living, practice expense, and malpractice GPCI—measures the prices of relevant inputs physicians face in a geographic area relative to national average prices.

Development of Physician Work RVUs

The development of resource-based RVUs for the physician work component of the fee schedule began in the 1980s and took about 7 years to complete. Building on preliminary studies conducted earlier in that decade, Harvard researchers undertook a complex, multiphased process with the cooperation of the American Medical Association (AMA) and the assistance of about 100 physicians organized into technical consulting groups. These groups developed vignettes to describe standard scenarios for delivering procedures listed in AMA's Physicians' Current Procedural Terminology (CPT). In a national survey, physicians were asked to rank procedures on the bases of four standard elements: (1) physician time, (2) mental effort and judgment, (3) technical skill and physical effort, and (4) stress stemming from the risk of harm to patients. The researchers reported a high level of consistency in how physicians in the same specialty ranked the relative work required for the services they performed. Cross-specialty panels drawn from the physicians' consulting groups chose procedure codes that represented equivalent or similar work within different specialties. Those codes then served as the basis for a statistical process to link all the codes ranked by each specialty along a common scale.

Physician work RVUs for about 800 procedure codes were developed through the survey process. RVUs for the remaining codes were extrapolated from these 800 codes. For extrapolation, codes were assigned to families of codes, and small groups of physicians who had participated in the previous development stages developed the relative work values.

Process to Refine the RVUs and Create New RVUs

Before the phase-in of the physician work RVUs could begin in 1992, HCFA had to create a process to both refine the existing values and create values for new procedure codes in the future. HCFA's early refinement process involved using Medicare carrier medical directors to revise some of the newly created work RVUs and to assign RVUs to some low-volume codes and other codes not included in the Harvard study. Today, a different

refinement process is in place that includes a multispecialty committee known as AMA's Specialty Society Relative Value Scale Update Committee (RUC). The RUC, created in 1991, makes recommendations to HCFA on the relative values to be assigned to new or revised procedure codes. HCFA then convenes a meeting of selected medical directors from its claims processing contractors to review the RUC's recommendations.[27] Currently, HCFA accepts most of these recommendations. According to AMA representatives, the RUC process is supported by most physicians and has increased the medical community's confidence in the physician work RVUs.

HCFA's Prior Fee Schedule Payments for Physicians' Practice Expenses

Until January 1999, the practice expense component of the fee schedule was still calculated according to a charge-based system set up in 1989. Two main data sources were used: Medicare claims and allowed charge data from 1991 and information on the percentage of revenue used on practice expenses from national surveys of physicians, specialists, and nonphysician practitioners reimbursed under Medicare's fee schedule. The RVUs for practice expenses were computed as follows:

1. Using national survey data, determine the average proportion of revenue devoted to practice expenses for physicians overall, for various specialties, and for the nonphysician practitioners paid under Medicare's fee schedule.

2. Using 1991 Medicare allowed charges, multiply the allowed charge for each procedure code by the average percentage of revenue devoted to practice costs for the specialty that performs that procedure.

Example: For a service with a 1991 allowed charge of $100 performed only by family practitioners (whose practice expense-to-revenue proportion is 52.2 percent), the calculation would be as follows:[28]

$100 x 0.522 = 52 (initial dollar) RVUs

3. For procedures performed by more than one specialty, multiply the practice expense proportion by the frequency with which each specialty performs that service and then add the product and multiply by the 1991 allowed amount.

[27]HCFA contracts with private entities to process and pay claims that physicians submit. These contractors are known as carriers.

[28]This and the following example are found in AMA's Medicare RBRVS: The Physicians' Guide, 1994.

Example: For a service with a 1991 allowed charge of $100 performed 70 percent of the time by family practitioners and 30 percent of the time by internists (whose practice expense to revenue proportion is 46.4 percent), the calculation would be as follows:

((0.522 x .70) + (0.464 x .30)) x 100 = 50.5 (initial dollar) RVUs

Malpractice RVUs are still computed under a similar statutory formula.

Fee Schedule Adjustments and the Conversion of RVUs to Dollars

HCFA adjusts the physician work, practice expense, and malpractice expense RVUs before they can be converted to dollars. Specifically, HCFA computes a geographic adjustment factor for each of the three types of RVUs; each factor is designed to reflect variation in the costs of the relevant component from the national average within fee schedule areas established by HCFA.

After the three RVU components for each service are multiplied by their respective geographic adjustment factors and combined, the uniform national conversion factor is applied. This factor converts each total RVU into a dollar amount representing Medicare's total allowed amount for each service. Medicare pays 80 percent of this amount, and the beneficiary copayment is 20 percent (once the annual deductible is met). The conversion factor is computed in a manner to ensure that budget neutrality is maintained and that total Medicare expenditures for physicians' services will not differ by more than $20 million from what the expenditures would have been if the current fee schedule had not been adopted.

Overview of HCFA's June 1997 Proposed Rule and November 1998 Final Rule

This appendix details HCFA's original and revised methodologies for creating resource-based practice expense payments that were contained in Federal Register notices of June 18, 1997, June 5, 1998, and November 2, 1998. Additional details of HCFA's first proposal can be found in our February 27, 1998, report.

Overview of HCFA's June 1997 Proposed Rule

In response to the Social Security Act Amendments of 1994 that required HCFA to develop resource-based practice expense payments that considered the staff, medical equipment, and medical supplies used to provide services and procedures, HCFA officials and researchers met in the spring of 1994 to discuss potential approaches. From these discussions, HCFA decided to develop separate estimates of the direct and indirect expenses associated with individual procedures.

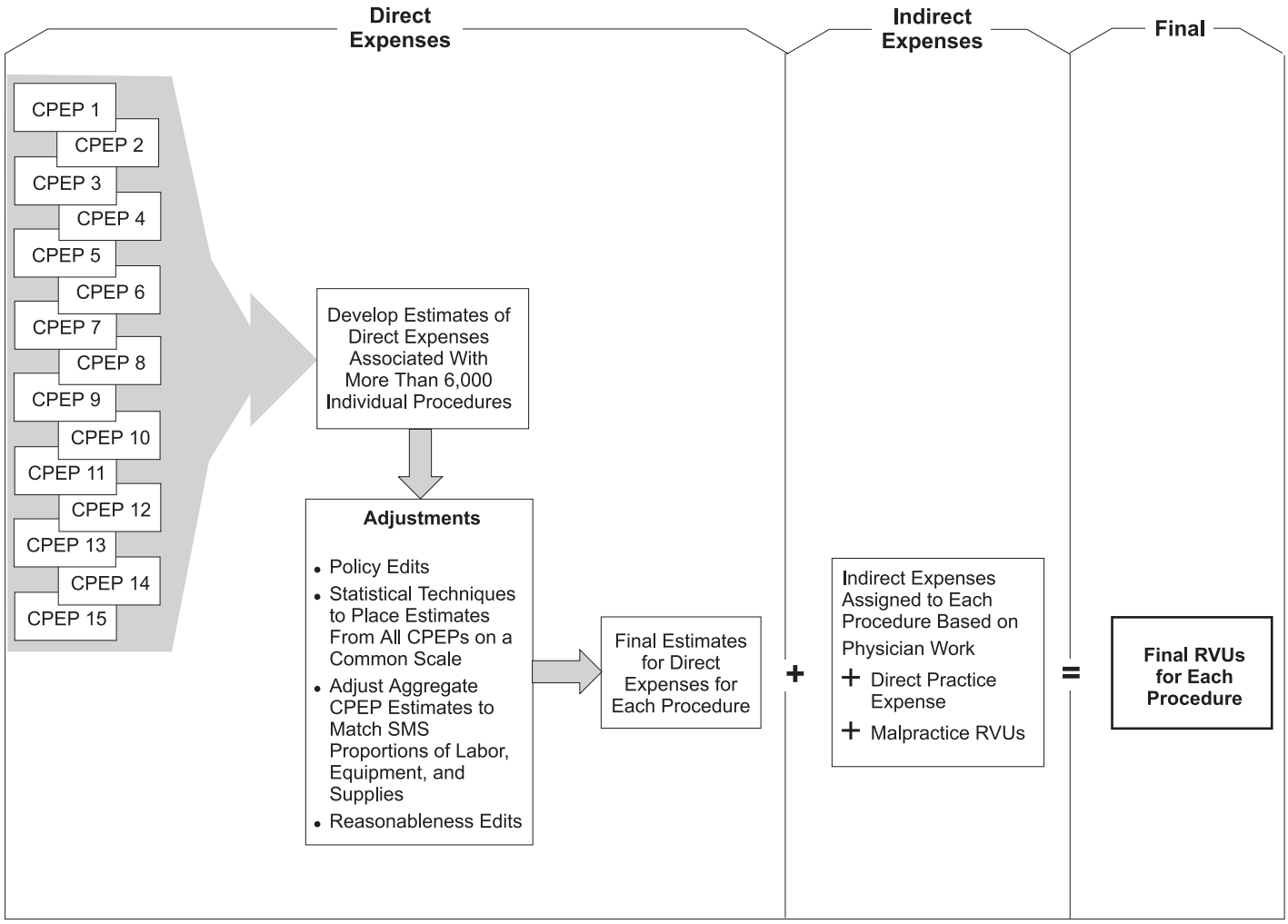
HCFA convened 15 clinical practice expert panels (CPEP), organized by specialty, to estimate the direct practice expenses associated with procedures. Each panel included 12 to 15 members, about half of whom were physicians; the remaining members were practice administrators and nonphysician clinicians, such as nurses. The CPEPs reviewed more than 6,000 procedures and developed estimates of the type and quantity of nonphysician labor, medical equipment, and medical supplies required to perform each procedure. A HCFA contractor then estimated the dollar costs of these inputs for each procedure.

Next, HCFA applied a series of adjustments to the direct expenses estimated by the CPEPs. First, HCFA reviewed the data to ensure that the costs arrived at were allowable under Medicare policy and revised the costs as necessary. Next, HCFA used a statistical "linking" methodology that adjusted the estimates from different CPEPs to put them on a common scale and make them directly comparable. HCFA also applied a scaling adjustment to the revised CPEP estimates to make them consistent with national practice expense data collected by AMA through its Socioeconomic Monitoring System (SMS) survey. The aggregate CPEP estimates for labor, equipment, and supplies each accounted for a different portion of direct expenses than the estimates from the SMS survey data. Therefore, HCFA inflated the CPEP labor expenses for each code by 21 percent, inflated CPEP medical supply expenses by 6 percent, and deflated CPEP medical equipment expenses by 61 percent.[29] Lastly, HCFA adjusted estimates that appeared to be unreasonable.

[29]These scaling adjustors are the SMS aggregate percentages divided by CPEP aggregate percentages.

HCFA allocated indirect expenses (such as the cost of rent and utilities) to individual procedures based on the physician work, direct practice expense, and malpractice expense RVUs associated with the procedure. See figure II.1 for a summary of this methodology.

Figure II.1: Summary of HCFA's June 1997 Proposed Resource-Based Practice Expense RVU Methodology



Overview of HCFA's November 1998 Final Rule

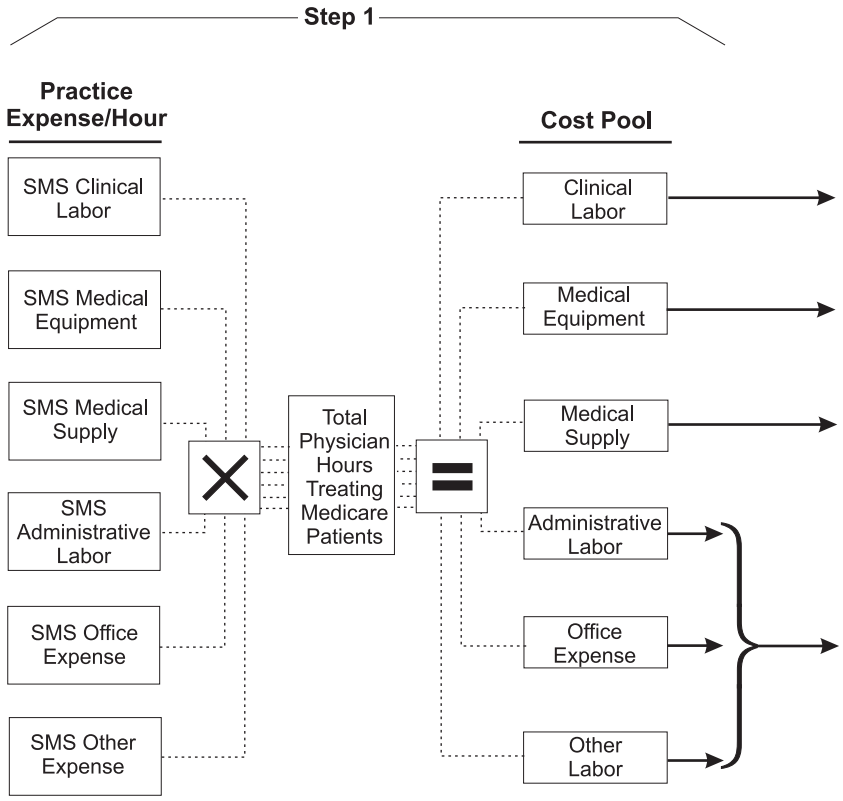
The Balanced Budget Act of 1997 provided additional direction to HCFA for developing the new practice expense RVUs. It required that HCFA use, to the maximum extent practicable, generally accepted cost accounting principles that recognize all staff, medical equipment, and medical supplies, not just those that could be tied directly to specific procedures.[30] This requirement, and comments on its first proposed rule, led HCFA to recommend a revised approach for establishing practice expense RVUs that it described in a June 5, 1998, Federal Register notice and then in its final rule of November 2, 1998.[31]

The new approach begins with the total annual practice expenses incurred by individual medical specialties, such as cardiology, family practice, and thoracic surgery, and then allocates these expenses to individual procedures performed by that specialty. There are three basic steps in HCFA's top-down approach: (1) for each specialty, estimate the total annual practice expenses for six different practice expense categories; (2) allocate a specialty's total practice expenses to individual procedures performed by the specialty; and (3) compute a weighted average of the expenses for procedures performed by multiple specialties. Figure II. 2 summarizes HCFA's revised approach. Figure II. 3 provides a detailed example, by step, of how the practice expense component is calculated.

[30]Sec. 4105(d), P.L. 105-33, 111 Stat. 251, 435, Aug. 5, 1997.

[31]The June 1998 notice also included a modified version of HCFA's original methodology. While stating that its original methodology continued to be valid, HCFA recommended the implementation of its new approach.

Figure II.2: Summary of HCFA's Revised Resource-Based Practice Expense RVU Methodology



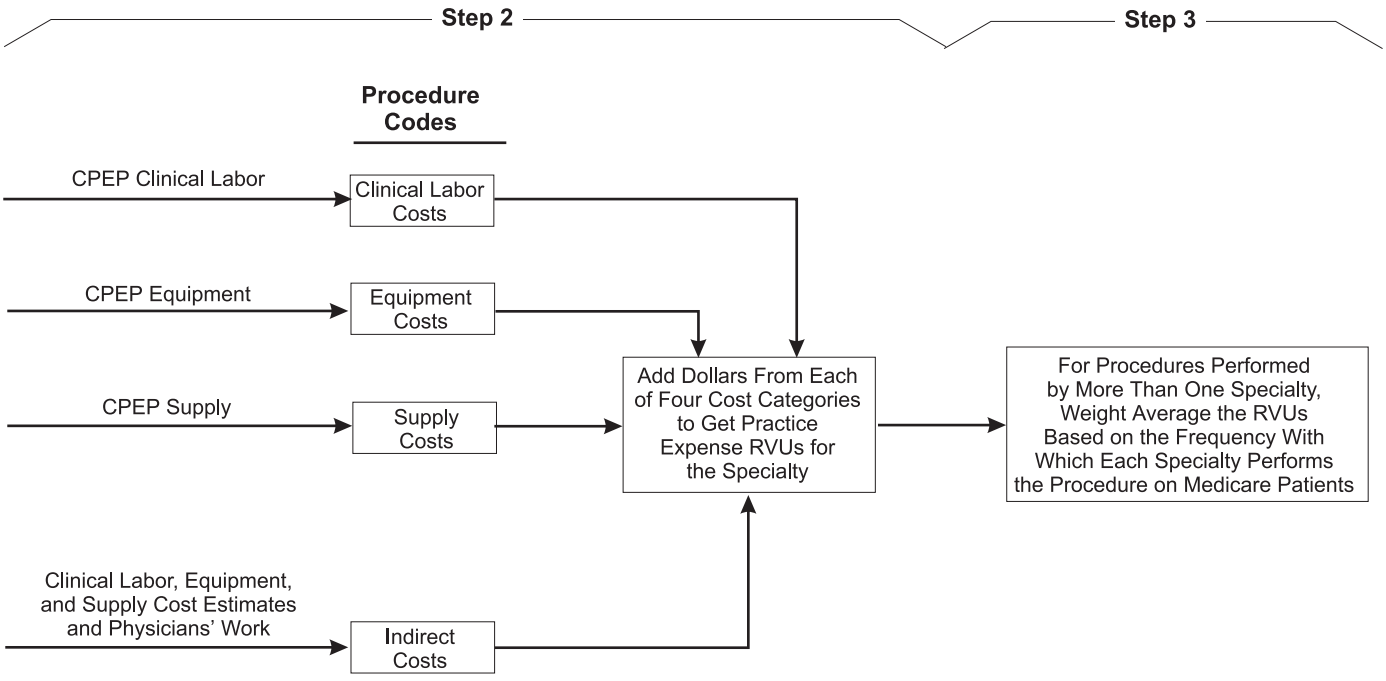
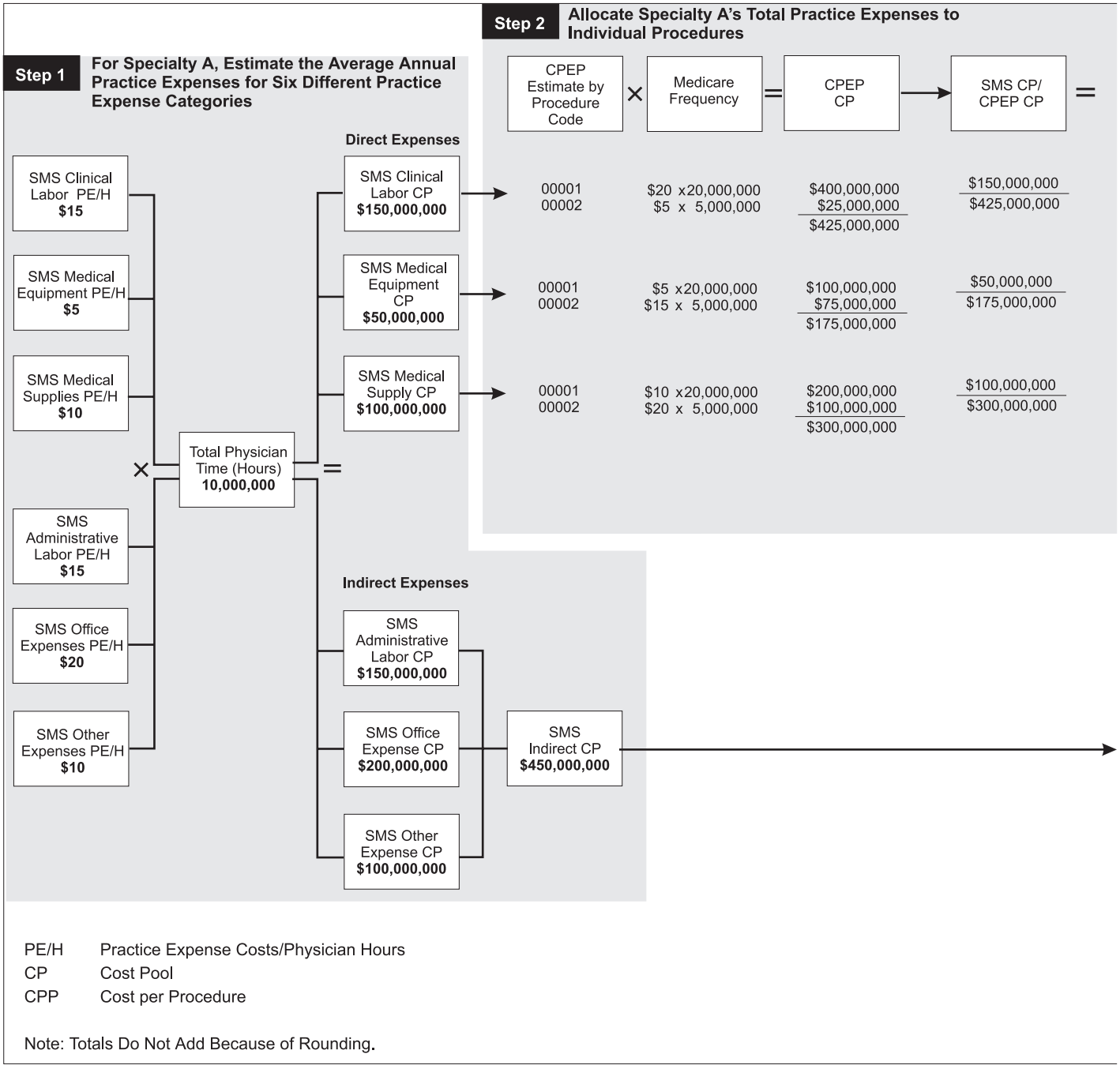
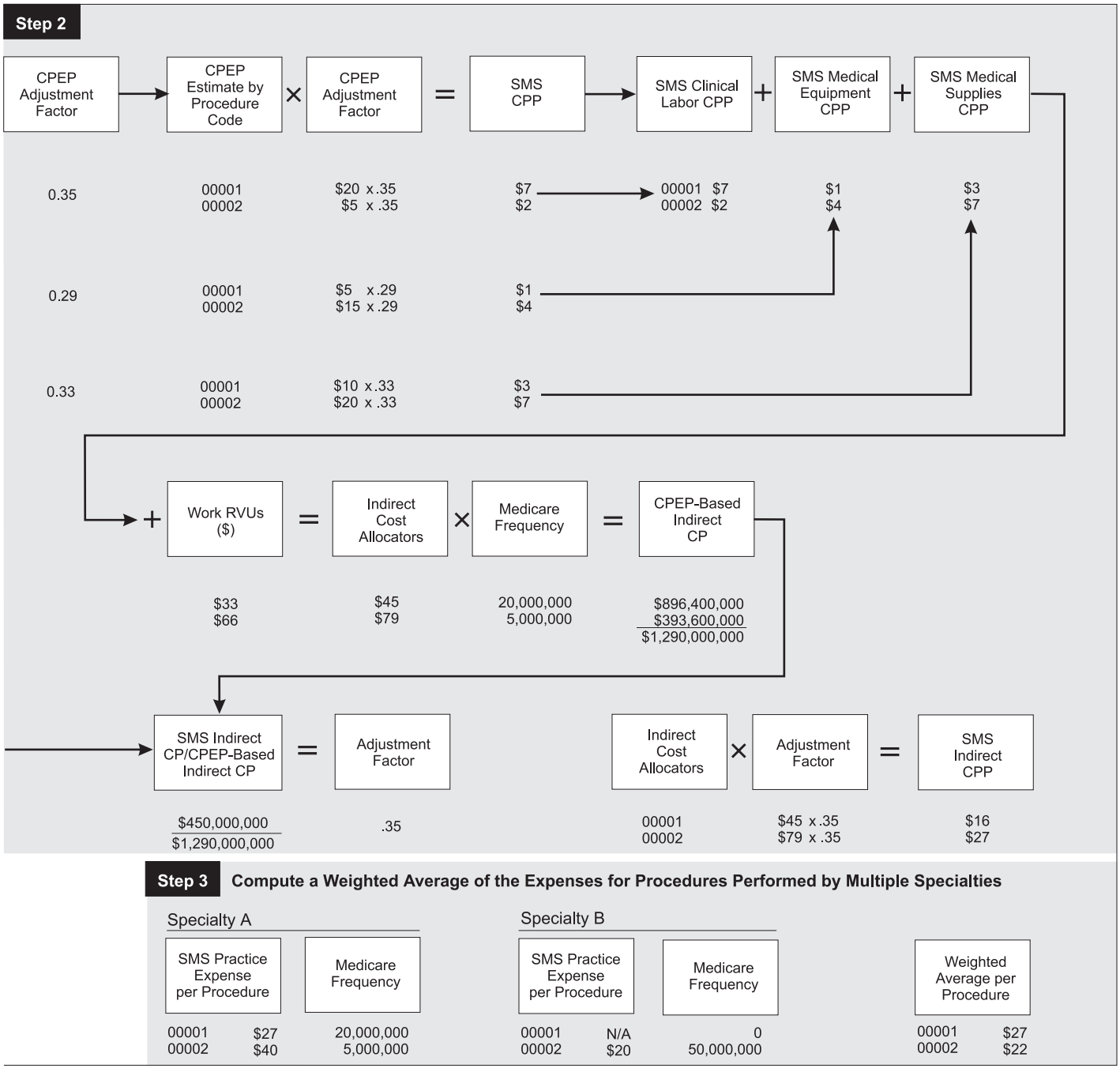

Step 2
Step 3
Procedure Codes
CPEP Clinical Labor
Clinical Labor Costs
CPEP Equipment
Equipment Costs
CPEP Supply
Supply Costs
Add Dollars From Each of Four Cost Categories to Get Practice Expense RVUs for the Specialty
For Procedures Performed by More Than One Specialty, Weight Average the RVUs Based on the Frequency With Which Each Specialty Performs the Procedure on Medicare Patients
Clinical Labor, Equipment, and Supply Cost Estimates and Physicians' Work
Indirect Costs

Figure II.3: Detailed Example of HCFA's Revised Resource-Based Practice Expense RVU Methodology



PE/H Practice Expense Costs/Physician Hours
CP Cost Pool
CPP Cost per Procedure

Note: Totals Do Not Add Because of Rounding.


Step 2
CPEP Adjustment Factor
CPEP Estimate by Procedure Code
CPEP Adjustment Factor
SMS CPP
SMS Clinical Labor CPP
SMS Medical Equipment CPP
SMS Medical Supplies CPP
0.35
00001
00002
$20 x .35
$5 x .35
$7
$2
00001 $7
00002 $2
$1
$4
$3
$7
0.29
00001
00002
$5 x .29
$15 x .29
$1
$4
0.33
00001
00002
$10 x .33
$20 x .33
$3
$7
Work RVUs ($)
Indirect Cost Allocators
Medicare Frequency
CPEP-Based Indirect CP
$33
$66
$45
$79
20,000,000
5,000,000
$896,400,000
$393,600,000
$1,290,000,000
SMS Indirect CP/CPEP-Based Indirect CP
Adjustment Factor
Indirect Cost Allocators
Adjustment Factor
SMS Indirect CPP
$450,000,000
$1,290,000,000
.35
00001
00002
$45 x .35
$79 x .35
$16
$27
Step 3
Compute a Weighted Average of the Expenses for Procedures Performed by Multiple Specialties
Specialty A
SMS Practice Expense per Procedure
Medicare Frequency
00001 $27
00002 $40
20,000,000
5,000,000
Specialty B
SMS Practice Expense per Procedure
Medicare Frequency
00001 N/A
00002 $20
0
50,000,000
Weighted Average per Procedure
00001 $27
00002 $22

Step 1. For each specialty, estimate the average annual practice expenses for six different practice expense categories. HCFA developed estimates for each specialty of the total annual practice expenses associated with treating Medicare patients for three direct expense categories—clinical labor, medical equipment, and medical supplies—and three indirect expense categories—administrative labor, office expenses, and other expenses. The incurred costs reported on the SMS survey for each type of practice expense were used to determine their proportion of the total for each specialty. The following formula summarizes how HCFA developed these estimates for each expense category:

Total annual practice expenses for treating Medicare patients (cost pool) = (average practice expenses/patient care hours) X hours spent treating Medicare patients for all procedures performed by the specialty

HCFA developed ratios, for each specialty, of the average practice expenses incurred per hour of a physician's time spent in patient care activities for each of the six expense categories. Estimates of the total annual physician practice expenses and average hours physicians worked per year in patient care activities were obtained from AMA's 1995-97 SMS surveys.

HCFA estimated the number of hours physicians spent treating Medicare patients by specialty. For each procedure, the number of times that procedure is performed by a specialty is multiplied by the amount of time physicians require to perform the procedure; HCFA then summed the results for all procedures performed by the specialty. HCFA used its Medicare claims data to determine Medicare volume for procedures performed by different specialties. The estimated time a physician spends in performing each procedure is a component of the physician work RVUs.

The SMS does not include as many physician specialties as HCFA recognizes, nor does it include nonphysician specialties, such as podiatry and optometry. As a result, HCFA had to use the SMS data from similar specialties to estimate the practice expenses per hour for specialties not included in the SMS, a process it called "crosswalking." HCFA also had to crosswalk specialties whose SMS samples were too small to develop their own practice expense per hour ratios. HCFA used clinical judgment to determine appropriate crosswalks for most of these specialties.[32] For example, to determine the practice expense cost pools for colorectal surgeons, psychologists, and chiropractors, HCFA used the SMS practice

[32]A few specialties provided data to guide HCFA in selecting appropriate crosswalks.

expense per hour data for general surgeons, psychiatrists, and internal medicine, respectively.

An example may help illustrate this first step in HCFA's methodology.[33] Assume that, on average, all cardiology practices spend $30 in clinical labor for each hour of direct patient care that a cardiologist performs in the practice. Also assume that all cardiologists nationwide spent a total of 20 million hours treating Medicare patients. Multiplying $30 per hour times 20 million hours results in a clinical labor cost pool for cardiologists of $600 million. If the cost pools for the five other expense categories add to $1.4 billion, this creates a total cost pool for cardiologists of $2 billion.

Step 2. Allocate a specialty's total practice expenses to individual procedures. Step 2 involves allocating a specialty's total practice expense cost pool to the procedures that the specialty performs. In our example, this would mean allocating the $2 billion cardiology cost pool to the procedures cardiologists perform, such as echocardiograms and cardiac stress tests. HCFA used two allocation approaches. HCFA treated the clinical labor, medical equipment, and medical supply expense categories as direct expenses and allocated them to procedures using the CPEP data. HCFA used the CPEP data on clinical labor by procedure to allocate the clinical labor cost pool to procedures, the CPEP data on medical equipment by procedure to allocate the medical equipment cost pool to procedures, and the CPEP data on medical supplies by procedure to allocate the medical supply cost pool to procedures. In cases in which two or more CPEPs developed estimates for the same procedure, HCFA simply averaged the different CPEPs' estimates.

For example, if the CPEP estimated that a cardiac stress test required five times more clinical labor than an echocardiogram, then an individual stress test would receive five times the dollars from the clinical labor cost pool.

HCFA treated administrative labor, office expenses, and other expenses as indirect expenses and used a combination of the fee schedule's physician work RVUs associated with a procedure and the direct practice expense estimates for clinical labor, medical equipment, and medical supplies to allocate the three indirect expense cost pools to the procedures performed by a specialty. To continue with our example, assume that the cardiology cost pools for administrative labor, office expenses, and other expenses

[33]The example used in this appendix illustrates the basic steps in HCFA's revised methodology but is not intended to incorporate all technical aspects of the methodology.

add to $1 billion. If a cardiac stress test has a combination of CPEP estimates and physician work RVUs that is twice as large as the combination for an echocardiogram, then the stress test procedure would receive twice as many dollars from the $1 billion pool as the echocardiogram.

By adding the direct expense and indirect expense values assigned to a procedure, HCFA calculates the total amount of money to be assigned to a procedure. In our example, if the cardiac stress test has direct expenses of $150 and indirect expenses of $350, its total expenses would be $500. However, this is not the actual Medicare reimbursement. This process simply establishes relative ranks among procedures, which are later converted to payment levels.[34]

Step 3. Compute a weighted average of the expenses for procedures performed by multiple specialties. HCFA's new approach creates separate practice expense estimates by specialty for procedures performed by multiple specialties. However, Medicare pays the same amount for a procedure to all physicians, regardless of specialty. HCFA therefore computed a weighted average practice expense, based on the frequency with which each specialty performs the procedure on Medicare patients. For instance, assume that, using HCFA's methodology, the total expense for a cardiac stress test performed by a cardiologist is $500 but $400 when performed by a general surgeon and that the procedure is performed 60 percent of the time by cardiologists and 40 percent of the time by general surgeons. Medicare's practice expense for this procedure would be $300 (or $500 times 0.6) plus $160 (or $400 times 0.4) for a total of $460.

When aggregated, the overall effect of weighted averaging is to redistribute practice expenses between the various specialties. In our example, Medicare's payments to cardiologists for a cardiac stress test are reduced by $40, from $500 to $460, while payments to general surgeons are increased from $400 to $460, a $60 gain. For most specialties, HCFA estimated that weighted averaging in the aggregate did not have a large effect on a specialty's cost pool; their cost pool would be no more than 10-percent greater or 10-percent less than it would have been without weighted averaging.

Once HCFA calculated the weighted average practice expense for each procedure, it ranked the procedures by total practice expenses and

[34]See appendix I for further details on the conversion.

converted the rankings into practice expense RVUs. These rankings are then converted into actual payment amounts.

Examples of Issues Regarding HCFA's Revised Methodology

Physicians' groups have raised issues about virtually every aspect of HCFA's new approach for developing resource-based practice expense RVUs. A number of their issues are discussed here. As discussed earlier in this report, we believe that HCFA should conduct sensitivity analyses to identify the changes to its methodology and data that would have the greatest effects on the new RVUs and target its refinement efforts on those areas. Where possible, data should be used to support any changes. It is likely, however, that a few issues raised cannot be addressed because the necessary data do not exist. Other suggested revisions may not be consistent with HCFA's methodology.

Alternatives to the CPEP Data and Treatment of Certain CPEP Estimates

Several physicians' groups questioned HCFA's use of the original CPEP estimates rather than the adjusted CPEP estimates or other data to allocate the practice expense cost pools to procedures performed by a specialty. Some groups suggested that HCFA use the validation panel estimates as allocators because they believe these estimates are more accurate.[35] Urology representatives said that they want to develop their own data for use in place of the CPEP estimates. HCFA said that it used the CPEP estimates for two reasons. First, commenters on its first proposed rule objected to the reasonableness edits HCFA made to the original CPEP data. Second, HCFA was not convinced that changes the validation panels made to the CPEP estimates were appropriate.

The question of substituting other data for selected specialties as discussed above is complex. Specialties would likely argue that HCFA should use the data—CPEP, validation panel, or their own—that are most advantageous to them. This would lead to the use of a "patchwork" of different data sources as allocators for different specialties. Also, data developed by a society to replace the CPEP estimates could contain biases that would increase that society's cost pool and decrease other societies' pools. HCFA officials said that they are open to adjusting the CPEP estimates or accepting alternative data from specialties during the refinement period if the new data do not significantly affect specialties' cost pools.

Another CPEP-related issue concerns how HCFA calculated expenses for several hundred redundant codes—codes reviewed by two or more CPEPs. In its revised methodology, HCFA simply averaged the original CPEP estimates that had been developed for these codes. HCFA did not use this approach in its original proposal because averaging different results would

[35]In October 1997, HCFA convened validation panels, composed primarily of physicians, to review the CPEP estimates for several hundred procedures and revise them as they believed necessary.

have distorted the relative ranks of codes within a CPEP. For example, an intermediate procedure might end up having more RVUs than a complicated procedure. HCFA's final rule notes that HCFA will review this issue during the 3-year phase-in period. During that time, HCFA could evaluate using the original or adjusted CPEP estimates for the specialty that most frequently provides a procedure—the dominant specialty.

Outliers in the SMS Data

In addition to the generally recognized limitations with the SMS data discussed in the report, there is a problem related to outliers—cases that seem unreasonable or that far exceed the norm. After review and analysis, some of these values may need to be adjusted during the refinement period. For example, AMA already excluded three cases in the SMS data in which physicians reported working in direct patient care 24 hours per day, 7 days a week. There are still extreme cases, however, such as physicians working an average of 16 hours or more per day every day of the week.

Other outliers can be seen in table III.1, which shows some extremely high practice expenses per hour compared with the mean and median practice expenses per hour for a specialty.[36] In one case, a physician reported practice expenses per hour of $964—14 times the mean for the specialty and equivalent to paying each nonphysician staff member an average of $148,000 annually. An AMA representative suggested that the respondent may have provided total expenses for the practice rather than his or her portion of them. It is important for HCFA to review and, where necessary, adjust the SMS data, since a few atypical cases can have a measurable effect on the practice expense per hour calculations, especially for specialties with small sample sizes.

Table III.1: Variation in Practice Expenses per Hour for Selected Specialties.

	Practice expenses per hour		
Medical specialty	**Mean**	**Median**	**Maximum**
General and family practice	$68.6	$56.8	$964.4
General internal medicine	54.2	44.3	650.8
General surgery	54.1	42.4	458.3
Ophthalmology	131.8	104.4	619.6

As a result of the outliers, the mean practice expenses per hour for these and other specialties are considerably higher than the median values. In

[36]The average or mean is based on the sum of the practice expenses per hour for each practice divided by the number of practices. The median or 50th percentile represents the value where half of the reported practice expenses per hour are higher and the other half are lower.

situations such as this, in which the SMS data contain large extremes, the median is considered a better measure of the typical value of the population because the influence of the outliers is reduced. A HCFA official said that HCFA used the mean because it accounts for all the expenses physicians reported on the SMS survey, including the high and low responses. HCFA's final rule identifies this as an issue to be reviewed during the 3-year phase-in period. In this review, HCFA needs to develop alternatives, analyze the effect of any changes, and decide how to proceed.

Medicare Policy Adjustments

As noted above, HCFA adjusted oncologists' SMS supply expenses because Medicare pays separately for certain drugs. A similar issue involves the expenses of staff, primarily nurses, who accompany physicians to the hospital. These staff reportedly perform such duties as assisting physicians at surgery, assessing patients following surgery, and educating patients. As we noted in our first report, HCFA appropriately disallowed nearly all such expenses from the CPEP data under its original methodology because Medicare pays for these expenses through other mechanisms. To include them would result in Medicare's paying for the same expenses twice.

To the extent that this practice is occurring, the costs associated with these staff are included as practice expenses in the SMS survey data. HCFA officials said that they believe that this is not a common practice; in addition, these costs are not easily identifiable in the SMS data. They also said that including these expenses in the CPEP estimates under their revised methodology affects only specialties that perform the particular procedures. That is, the CPEP data affect not the size of a specialty's cost pool but only how the pool is allocated to the procedures performed by the specialty. However, the American Academy of Family Physicians correctly notes that including these expenses in HCFA's calculations has a ripple effect across all specialties and could affect the relative values of office-based and surgical procedures. However, it is unclear whether excluding these costs would significantly change the new RVUs.

Sensitivity analyses would provide HCFA with a sound basis for including or excluding these expenses as part of its revised methodology. HCFA could estimate the expenses associated with this practice using the CPEP estimates and could decide if it should spend the time and effort to determine how to remove these costs from the SMS data. In other words, HCFA should not spend a lot of time and effort on this issue if it has little effect on the RVUs. If HCFA removes these costs from the SMS data, it should also remove them from the CPEP data.

The Determination of Practice Expenses Per Hour and Hours Serving Medicare Patients

HCFA's calculations of practice expenses per hour are based in part on the time that physicians spend in patient care activities. Some specialties make greater use of nonphysician practitioners, such as nurse assistants and optometrists, and may benefit from this step in the methodology. This is because the salaries and expenses of the nonphysician practitioners are counted as a practice expense and because by using these staff, physicians can generate more billable procedures. These two factors result in higher practice expenses per hour for their specialties. HCFA appropriately acknowledged that this is an issue for review during the refinement period.

The American Association of Neurological Surgeons-Congress of Neurological Surgeons said that the methodology has disadvantages for medical specialties whose physicians work longer hours in patient care activities compared with other specialties. The SMS survey asks physicians to record the number of hours they spent in patient care activities, and HCFA uses the average for a specialty in its calculations. As the number of hours spent in patient care activities increases under HCFA's new methodology, the practice expenses per hour decreases (assuming that total expenses remain constant), resulting in a smaller practice expense cost pool for a medical specialty. Rather than base its calculations on the average number of hours that physicians in a specialty work, this physicians' group believes that HCFA should use a constant 40 hours per week for all specialties. They argue that most practice expenses are generated when the office is open and that this would be a better measure for HCFA to use.

Using a constant number of hours would increase the practice expense per hour estimates for physicians working more hours. However, this approach would be inconsistent with HCFA's overall methodology, which assumes that Medicare claims data reflect physicians' hours that are consistent with those reported on the SMS survey.

Physicians' groups also commented on the physician time data that HCFA uses to determine the total number of hours physicians spend treating Medicare patients. First, some physicians' groups question HCFA's adjustments to the physician time data. These data come from two sources: (1) a Harvard University study that developed physician time estimates for codes in existence when the work RVUs were originally created and (2) RUC estimates developed for new codes created subsequent to the Harvard study and for older codes that required adjustment. HCFA found that the RUC's time estimates were systematically

greater by an average of about 25 percent than those developed from the Harvard study for the same codes. HCFA therefore increased the Harvard time estimates by this amount on average to ensure consistency between the two data sources.[37] According to the RUC, however, this adjustment may not be appropriate. RUC time estimates may be higher because procedures are performed differently now than they were at the time of the Harvard study. RUC representatives said that they would like more information on HCFA's adjustments to ensure that they are appropriate.

HCFA is also concerned about the accuracy of the physician time data for high-volume codes that have relatively little physician time associated with them. For example, if a high-volume procedure typically takes 4 minutes to perform but has 5 minutes of physician time assigned to it in the work RVUs, the procedure's share of the practice expense pool for the specialty is inflated by 25 percent. HCFA has appropriately expressed a willingness to review comments during the refinement period on potential inaccuracies with these data and to make adjustments where appropriate.

The Use of Medicare Claims Information

Several physicians' groups criticized HCFA's use of Medicare claims data, rather than national claims data for all insurers, to establish and allocate the practice expense cost pools for specialties. HCFA officials acknowledged that it would be preferable to use data more representative of physicians' entire practices. The American Academy of Family Physicians is concerned that specialties that typically do not treat Medicare patients, such as pediatricians and obstetricians, will be disadvantaged because most of their procedures are not provided to Medicare patients and therefore are not included in the Medicare claims data. Specialties with smaller values of Medicare claims, however, may benefit from this aspect of HCFA's method. Only having the more complete data would allow HCFA to determine the effect. However, such data are not available, and none of the medical societies identified specific sources of data that HCFA could use.

Several physicians' groups suggested that HCFA refine the Medicare claims data, citing inaccuracies. For example, in 1996 Medicare paid almost 32,000 claims for lumbar discectomies (CPT code 63030), a procedure typically performed by neurosurgeons or orthopedic surgeons. However, the data include 835 claims paid to physicians' assistants and 102 claims paid to general practitioners for this procedure. According to the

[37]On the clinical judgment of its staff, HCFA adjusted some of the RUC time estimates because HCFA believed these estimates were unreasonable.

American Association of Neurological Surgeons-Congress of Neurological Surgeons, nonsurgical specialties should not be performing lumbar discectomies. Given the millions of claims Medicare pays annually, a small percentage of errors with these data are not unexpected. Further, there is no reason to believe that these errors are not evenly distributed among specialties and therefore would likely have minimal effect on the final RVUs. However, if medical specialties demonstrate significant problems with these data, HCFA said that it will review them during the phase-in period and make necessary adjustments.

Medical Societies, Physicians' Groups, and Others We Contacted

Medical Societies and Physicians' Groups

American Academy of Family Physicians
American College of Emergency Physicians
American College of Physicians-American Society of Internal Medicine
American College of Surgeons
American Medical Association
American Medical Association's Specialty Society Relative Value Scale Update Committee
American Society of Clinical Oncology
Medical Group Management Association
Practice Expense Coalition, representing 41 medical specialties, including the American Academy of Ophthalmology, American College of Cardiology, and American Society of General Surgeons
Practice Expense Fairness Coalition, representing eight medical specialties, including the American Academy of Pediatricians, American College of Rheumatology, and American Geriatric Society

Health Services Researchers and Government Organizations

Compass Health Analytics
Integrated Healthcare Information Systems, Inc.
Medicare Payment Advisory Commission

Comments From the Health Care Financing Administration

DEPARTMENT OF HEALTH & HUMAN SERVICES

Health Care Financing Administration

The Administrator
Washington, D.C. 20201

JAN 15 1999

FROM: Nancy-Ann Min DeParle
Administrator, HCFA

SUBJECT: General Accounting Office (GAO) Draft Report, "Medicare: Progress Made Revising Physician Practice Expense Payments But Refinement Needed"

TO: William J. Scanlon, Director
Health Financing and Systems Issues, GAO

We appreciate the opportunity to review your draft report to Congress concerning the revisions to physician practice expense payments. We are pleased that the GAO found that the methodology we will be using to calculate resource-based practice expense represents a reasonable starting point for establishing resource-based practice expense relative value units.

We agree with the recommendations the GAO has made in the report, and are enclosing our comments to the specific recommendations. We look forward to working with GAO and the Congress as we continue to refine our methodology for establishing payments to physicians.

Enclosure

Comments of the Health Care Financing Administration (HCFA) on the General Accounting Office (GAO) Draft Report: "Medicare: Progress Made Revising Physician Practice Expense Payments But Refinement Needed"

Overview

For the first time, the 1999 Medicare Physician Fee Schedule will begin to relate payment for physician practice expenses to the actual resources used to provide medical services, rather than physicians' historical charges. Breaking the link between Medicare practice-expense payments and historical physician charges will create a fairer payment system. By ensuring that Medicare pays physicians fairly, we help ensure that Medicare beneficiaries will continue to have broad access to physicians.

We are pleased that the GAO found our methodology to calculate resource-based practice expense values represents a reasonable starting point for establishing resource-based practice expense relative value units (RVUs). The report also found that we have used the best available data to accomplish this task. At the same time, the report stresses the need to improve the existing data, collect additional data, and undertake further analyses during the refinement period. We agree with all of these findings, and address them below.

GAO Recommendation

We recommend that the Administrator of HCFA:

-- Use sensitivity analysis to identify issues with the methodology that have the greatest effect on the new practice expense RVUs and to target additional data collection and analysis efforts. One clear example of where HCFA should evaluate different policy options for revising the methodology is use of physician time, instead of physician work, to allocate indirect expenses.

HCFA Comment

We concur with the recommendation to target our refinement efforts on those issues having the greatest impact. We also agree that, as the refinement of such practice

expense RVUs involves so many complex issues, we must set priorities in order to target our limited resources to the most essential analytic questions. We agree with GAO that the allocation of indirect expenses is one such significant issue, and, in the November 2, 1998 final physician fee schedule rule, we indicated our intention to analyze alternative allocation mechanisms. As we also stated in this final rule, we plan to obtain contractor support and other independent advice on the broad methodological issues, particularly on those that result in major redistributions among specialties.

GAO Recommendation

-- Develop plans for updating the practice expense fees that address how to (1) assign practice expense RVUs to new codes, (2) revise the RVUs for existing codes, and (3) meet the legislative requirement for a comprehensive 5-year review of the resource-based practice expense fees.

HCFA Comment

We concur with this recommendation. As described in our final rule, the AMA's Relative Value Update Committee (RUC) has offered to make recommendations on the practice expense RVUs for new and revised codes in the same manner that is done for the work RVUs. The RUC also offered to set up a multi-specialty Practice Expense Advisory Committee (PEAC) that could make recommendations on the refinement of the resource inputs for existing codes. This approach is supported by almost all specialty societies, and we believe it offers a feasible method of refining the input data for the approximately 3000 codes on which we received comments. As the practice expense RVUs will be interim during the transition period, we will also be accepting comments from any organization or individual on the refinement of the practice expense values for all codes in the physician fee schedule. We also agree that we need to develop a plan to address the future 5-year review of practice expense RVUs. This is one of the complex issues on which we also plan to seek advice from an outside contractor and/or other independent sources in order to fulfill this legislative requirement.

GAO Recommendation

-- Monitor indicators of beneficiary access to care, focusing on those procedures with the greatest cumulative reductions in their Medicare fees, and consider access problems when evaluating the physician payment system.

HCFA Comment

We concur with this recommendation. We are currently conducting substantial research in order to evaluate beneficiary access to physicians. Some of this research includes:

- Augmenting the beneficiary questionnaire for the 1998 Medicare Current Beneficiary Survey to further clarify access problems;
- Tracking physician participation in Medicare through the use of unique physician identification numbers. This mechanism will enable us to identify each physician's total Medicare reimbursement (fee-for-service) and monitor changes in Medicare billings;
- Issuing a survey of all participating Medicare physicians designed to identify physician specialties and procedures by geographic areas; and
- Tracking claims data in "vulnerable populations".

Further, Section 1848(g)(7) of the Social Security Act, as enacted by the Omnibus Reconciliation Act (OBRA) of 1989 (Public Law 101-239), requires the HHS Secretary to monitor and report annually to Congress on changes in utilization and access by population groups, geographic areas, types of services, and possible sources of inappropriate utilization. For our next report submission, to the extent possible, we will also examine access indicators for those procedures with the greatest cumulative reduction in Medicare fees. This report to Congress will be one of the tools we will use as we move forward to implement this GAO recommendation.

Technical Comments

Now on p. 5.

1. Page 7-- In the very last line, change "3-year transition period" to "4-year transition period" to agree with the discussion of the transition found in the rule (see, for example, 63 Fed. Reg. 58832).

Now on p. 27.

2. Page 33--In the abbreviations, for the definition of CPEP change "expense panel" to "expert panel." Also, for the last item, change "SRG" to "SGR."

Now on p. 29.

3. Page 36--In the very last line, change "(SRG)" to "(SGR)."

Now on p. 32.

4. Page 40--For item 3 in the example, for the calculation of the RVUs, change "70" to ".70" and change "30" to ".30."

Now on p. 33.

5. Page 43--In the 3rd full paragraph, first line, change "clinical practice expense panels" to "clinical practice expert panels."

Now on p. 47.

6. Page 61--First full paragraph, line 3, change "fewer hours" to "longer hours."

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