MEDPAC Medicare Payment Advisory Commission

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December 30, 2004

The Honorable Richard B. Cheney
President of the Senate
U.S. Capitol
Washington, DC 20515

Dear Mr. Vice President:

Section 644 of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 requires the Medicare Payment Advisory Commission to conduct a study on the practice expense relative values for physicians in the specialties of thoracic and cardiac surgery to determine whether such values adequately take into account the attendant costs that such physicians incur in providing clinical staff for patient care in hospitals. Our findings are as follows.

Background

In 1992, Medicare changed how physicians are reimbursed by adopting a fee schedule and establishing relative value units (RVUs) for physician work, practice expense (PE), and professional liability insurance. 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 the original fee schedule, the work RVUs were developed using surveys of actual physician resource costs. By contrast, the RVUs for PE and professional liability insurance were based on physicians' historical charges. The Social Security Act Amendments of 1994 required CMS to develop a resource-based system for determining practice expenses for each physician service, and the Balanced Budget Act of 1997 (BBA) required that the resource-based PE RVUs be phased in over a four-year period, 1999 to 2002.

The BBA also directed that in the development of the new resource-based relative value units the Secretary:

> utilize to the maximum extent practicable, generally accepted cost accounting principles which (i) recognize all staff, equipment, supplies, and expenses, not just those which can be tied to specific procedures, and (ii) use actual data on equipment utilization and other key assumptions:

CMS (then Health Care Financing Administration (HCFA) attempted to recognize all staff, equipment, supplies, and expenses by changing their methodology and starting with data from an

American Medical Association (AMA) survey of physicians' practice expenses that included all of those categories. The Government Accountability Office (GAO) agreed that the use of incurred costs, as reported in the survey, was consistent with traditional cost accounting practices.[1]

In 1999 during the phase-in period, CMS decided to exclude the expense associated with the clinical staff that physicians bring to the hospital. Those staff may assist in the operating room, or provide pre- or postoperative services, for example, patient care, patient education, or discharge planning. They may be physician assistants, surgical technologists, certified registered nurse first assistants, or others. CMS gave three reasons for this decision to exclude such clinical staff in the final rule on revisions to the physician fee schedule for calendar year 2000:[2]

- Medicare should not pay twice for the same service. Some clinical staff who provide assistant at surgery services in the operating room during a procedure are already paid separately by Medicare.[3] Clinical staff who provide nursing care duplicate services Medicare already pays the facility to provide. If the clinical staff is substituting for a physician's service, those services are already paid for through the physician work RVUs.
- It is not typical for most specialties to use their own staff in the facility setting. The rule cited the American Hospital Associations' national hospital panel survey which found that only 11 percent of responding hospitals reported that it was a regular practice for physicians to bring their own staff to the hospital.
- Payment through the fee schedule would be inconsistent with both law and Medicare regulations. In CMS's view, for a hospitalized beneficiary, the only payments beyond the hospital payment allowed by law and regulation are for services provided by physicians and specified nonphysician practitioners (NPPs). Therefore, any other payments from Part A or Part B for nonhospital employees are prohibited, and by extension should not be included in practice expense.[4]

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[1] General Accounting Office.1999. *Medicare physician payments: Need to refine practice expense values during transition and long term*, GAO/HEHS-99-30, Washington, DC: GAO. February.

[2]Federal Register. 1999. Vol. 64, No. 211, November 2, page 59399.

[3] Medicare pays separately for first assistant at surgery services if the first assistant is a physician assistant, a nurse practitioner, a clinical nurse specialist, or a certified nurse midwife.

[4]Section 1862(a) (14) of the Social Security Act states that no payment for expenses other than physician services (as defined in regulation) be made under either Part A or Part B unless the services are furnished under specific arrangements, or unless exceptions are specified in statute (as they are for PAs, clinical nurse specialists, etc.) CMS's (then HCFA's) reading of the applicable law and regulation concluded that " ... no payment should be made under the physician fee schedule that reflects the costs of physicians' clinical staff used in the hospital setting. Services performed by nonphysician clinical staff do not fulfill the definition of services personally furnished by a physician and, therefore, the exception to the exclusion for physician services created by Section 1862(a) (14) of the Act does not apply" (Federal Register, November 2, 1999).

In its response to comments on this issue, CMS also noted in the final rule that the BBA provision quoted previously (that CMS utilize generally accepted cost accounting principles which recognize all staff, supplies, and expenses) was primarily directed at its prior methodology and did not supersede other provisions of the law or regulations governing Medicare payment, nor "is there any indication that the BBA was intended to prevent us from excluding noncovered or otherwise paid for services as allocators of direct practice expense." In the same rule, CMS accepted new practice expense data from a survey conducted by the Society of Thoracic Surgeons (STS) and raised the practice expense per hour cost from the $63.80 calculated from the AMA survey to $71.97 calculated from the STS survey.

Although the Department of Health and Human Services (HHS) Office of Inspector General (OIG) found that for cardiothoracic surgeons, bringing clinical staff was not uncommon—almost 75 percent of cardiothoracic surgeons reported doing so—they agreed with CMS's rationale about paying twice for the same service.[5] The report concluded that Medicare already pays for nonphysician clinical staff in one of three ways:

- To the physicians through the work RVUs, if the clinical staff is doing work the physician would normally do.
- To the mid-level practitioners directly, if the practitioner is a physician assistant, nurse practitioner or clinical nurse specialist who can bill Medicare separately for services as a first assistant at surgery.
- To the hospital through Part A or the outpatient PPS as part of the facility payment.

The OIG also found that approximately 19 percent of the time hospitals provide either partial or full compensation to surgeons for the use of their nonphysician clinical staff.

If the Congress defines *"adequately taking into account the attendant cost that physicians incur in providing clinical staff for patient care in hospitals"* as accounting for all clinical staff and all practice expenses, then the PE RVUs for hospital procedures for which the surgeon typically brings clinical staff no longer do so because the costs of clinical staff brought to the hospital are now excluded from the practice expense calculation for those procedures. (As we discuss later, the costs are still in the fee schedule, but are distributed to other procedures and specialties.) This conclusion is especially relevant to procedures performed predominately by cardiothoracic surgeons, in light of the HHS OIG's finding that 75 percent of those surgeons reported bringing clinical staff to the hospital. While this conclusion is clear on a conceptual level, the practical difficulties of appropriately accounting for the clinical staff costs that should and should not be

[5] Office of Inspector General, DHHS. 2002. *Medicare payment for nonphysician clinical staff in cardiothoracic surgery*, OEI-09-01-00130. April.

reflected in the PE RVUs are quite significant. The various issues, some relating to offsetting revenues, others to duplicate payments, are discussed in the analysis that follows.

Analysis

Some of the clinical staff brought to the hospital may be NPPs who can bill Medicare separately for being assistant at surgery during the procedure. (CMS reports that an STS survey found more than half the surgeons bringing clinical staff to the hospital reported they received Medicare payment for some of those clinical staff.[6]) These Medicare payments offset the surgeon's cost of employing the NPP and therefore their entire cost should not be included in the physician's practice expense. Data are not available to assess whether the payment for assistant at surgery, which is 13.6 percent of the physician fee schedule for every procedure for any NPP, fully offsets or possibly exceeds their cost for any given procedure. The assistant at surgery payment does not explicitly cover any services performed outside the operating room.

In some cases, the hospital pays the surgeon (or the practice) for the clinical staff the surgeon provides.[7] The OIG report finds this happens about 19 percent of the time when physicians bring their own staff. If hospitals do so, then the entire cost of the clinical staff should not be included in practice expense costs. If hospitals are willing to assume responsibility for these costs, it may be that they recognize that the cost of these staff is already included in Medicare's payment to the hospital, or that they determine these are profitable diagnosis related groups (DRGs) and are thus willing and able to pay the surgeon for his clinical staff.

For some surgeons who neither receive reimbursement from the hospital, nor use clinical staff who can bill Medicare, there is no direct revenue to offset their expense for bringing clinical staff to the hospital. There may be indirect offsets however.

Surgeons may bring clinical staff to increase their own productivity. It would be consistent with how PE RVUs are determined for other services for Medicare to pay physicians for clinical staff brought to the hospital that either substitute for physician's time or assist the physician in treating the typical patient. When the clinical staff substitute for the physician's time, essentially making the physician more productive, it is important that the work and the PE RVUs reflect this substitution. The work RVUs represent an average among physicians in a survey of how much time, effort, technical skill, physical effort, and psychological stress it takes to perform an

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[6] HCFA, HHS. 2000. *Physician fee schedule for calendar year 2001; final rule.* Federal Register, Vol. 65, No.212, November 1, page 65395.

[7] So it cannot be construed as a kickback, hospitals can only offset the cost of clinical staff brought by the physician by the market price for similar staff they would otherwise provide in the operating room for a particular procedure.

operation and associated visits over the global period.[8] Theoretically, if the presence of clinical staff in the hospital allows surgeons to routinely accomplish the surgery and associated pre- and postoperative tasks more rapidly, the work RVUs for the procedure would be reduced to reflect any increase in productivity. However, the collection of information for the work and PE RVUs was not done simultaneously. Therefore, if the mix of physician and clinical staff resources used for a procedure changed over time, it is possible the information provided for the work RVU is not consistent with that provided for the PE RVU. For example, the work RVUs for cardiothoracic procedures either increased or stayed the same at the last revision in 2002, which may or may not be consistent with productivity associated with the use of clinical staff. Before adjusting PE RVUs for cardiothoracic surgeons's procedures, it would be important to ensure the work and the PE RVUs were appropriately calibrated. It is also important to note that clinical staff could increase the quality of the operation and hospital stay rather than increase productivity; currently Medicare does not pay for increased quality.

The current situation of excluding the cost for clinical staff brought to the hospital from practice expense RVUs raises two difficult issues.

One issue is a matter of equity: If the cost of separately payable clinical staff brought to the hospital are removed from practice expenses, why should the costs of separately payable clinical staff in physicians' offices still be included? The cost of clinical staff in the physician's office (staff who are not brought to the hospital) is included in the current definition of practice expense, even though some of them can charge Medicare separately. For example, physician assistants and nurse practitioners in the physician's office can be paid separately by Medicare for seeing patients. If their total cost is not allowable in the hospital setting it should not be in the office setting either. Offsetting separately billable payments would change practice expense relative values for many, if not all, specialties.[9]

The other issue is technical. Although it may have been appropriate to some extent to remove the costs of clinical staff in the facility setting from practice expenses, the way those costs were removed may have led to problems. We address this issue in the next section.

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[8] For each procedure a global payment period is specified that includes all preoperative and postoperative care required during that time. For example, the global period for CPT Code 33533: *Coronary artery bypass, using arterial graft(s); single arterial graft* is 90 days.

[9] CMS recognized this issue. In the 2001 final rule (ibid.) for example, it noted that the costs of separately payable NPPs were included in the numerator of the practice expense-per-hour calculation yet their hours of patient care were not in the denominator. CMS proposed that the next physician survey include questions to provide data for addressing this issue.

Technical issue: Given that not all of the cost of clinical staff brought to the hospital should be included in the practice expense for surgeons, there is a technical question of whether the method used to remove the costs was optimal. The current method for calculating practice expense per procedure is a top-down method that starts with a definition of practice expense that includes all clinical staff employed by the physician. If certain elements of that expense are deemed to be excluded, they have to be taken out in some way.

Attachment 2 gives a description of how the practice expense RVUs are calculated. Very briefly the calculation starts with practice expense data from the AMA's Socioeconomic Monitoring System (SMS) survey. Pools of practice expenses, including one for clinical staff, were estimated for each specialty.

The original SMS pools for clinical staff practice expense included all of the clinical staff employed by the physicians whether the staff worked in the physicians' offices or were brought to a facility. Physician assistants, nurse practitioners, and clinical nurse specialists were all included as expenses to the physician even if they could bill separately for their services.

The problem is that CMS could not simply subtract the cost of clinical staff brought to hospitals from the original SMS expense pool because the data available did not break out that cost separately. Instead, the SMS clinical staff PE pools for cardiac and thoracic surgeries were not reduced. Rather, the weighting value for the allocation of the clinical staff cost pool by procedure was set to zero for clinical staff brought to the hospital. When the clinical staff pool was redistributed among procedures according to the new weights, the result was relative values that were very high for some procedures, because the entire cost pool (which included both clinical staff used in the office and clinical staff brought to the hospital) was allocated to procedures only according to clinical staff use in the office. For example, the clinical practice expense RVUs in the cardiac surgery pool for an office visit for an established patient (CPT code 99213) increased six-fold after the weights for clinical staff brought to hospitals were set to zero.

If the process ended at this point, all of the clinical staff pool for cardiac surgeons would still be assigned to RVUs for the specialty, although its allocation across procedures would be unusual. However, in the last step, when a single rate was calculated for each service across all specialties, part of this high value was redistributed to other specialties by averaging. That brought payments for 99213 for example, from the $83.26 implied by the higher clinical practice expense value, to $35.47 after averaging across specialties. Some of the clinical staff pool thus was redistributed to other specialties and out of cardiac and thoracic surgery. It is not clear that this is an optimal solution that results in appropriate relative values.

Conclusion

Changing the current system for establishing practice expense RVUs to solve the problem of accurately accounting for the cost of clinical staff brought to the hospital by cardiothoracic surgeons would be complex. In addition, the issue is not exclusive to cardiothoracic surgeons although they may be the group that uses such staff most frequently. Changes in policy should also apply when other specialties typically bring clinical staff. Identifying which clinical staff to include, their costs, and offsetting revenues might well require a new data source, significant time and attention of CMS staff, and force changes in practice expense RVUs for many, possibly all procedures, if all offsetting revenues were taken into account.

Without such an undertaking, if instead all the costs for clinical staff were included in the physician practice expense calculation, the issue of duplicate payments for clinical staff brought to hospitals would still remain. GAO recognized both that there were duplicate payments and the difficulty of removing them.[10] Those duplicate payments should in theory be removed from the other payment systems; but this would be very complex and possibly involve adjustments to the hospital prospective payment systems, physician work RVUs, and the graduate medical education payment system.

As our report on the impact of phasing in the practice expense RVU system suggests, the next review of that system will require rethinking many aspects, including the data sources.[11] When that is done it may be a more opportune time to address this smaller question of how to deal with the cost of clinical staff brought to the hospital by cardiothoracic surgeons. At that time the cost of clinical staff in general could be addressed, including how to offset revenue produced by that staff from separate billing of Medicare both in the facility and office setting for all specialties. Doing so could result in more equitable treatment of clinical staff expenses across specialties and prevent any Medicare double payments. An approach of this sort was recommended by the Lewin Group in its review of the practice expense methodology.[12]

One broader, conceptual issue that would remain even after appropriate PE RVUs were determined would be how Medicare could link the payment for clinical staff to quality.

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[10] GAO stated, "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." GAO/HEHS-99-30 ibid.

[11] Medicare Payment Advisory Commission. 2004. *Impact of resource-based practice expense payments for physician services.* Washington DC: MedPAC.

[12] The Lewin Group, Inc. 1999. Practice Expense Methodology Draft Report Prepared for the Health Care Financing Administration, #500-95-0059/TO#6, September 24.

The current separation of hospital payment, physician payment, and separate payment for only certain types of clinical staff for certain services complicates payment for quality.

Consideration of an alternative approach to the broader issue of paying for physician services in hospitals might be worthwhile. An ideal payment system would recognize the complicated reality that different surgeons have different preferences, bring different clinical staff to hospitals, and that the arrangements between hospitals and surgeons differ according to circumstance. For example, some surgeons routinely bring clinical staff with them to the hospital. They may be physician assistants, surgical technologists, or others—some now eligible for separate payment and some not. In some cases physicians pay the clinical staff, and in some cases the hospital reimburses the physician for the clinical staff's time. In some hospitals, for some surgeries, hospital employees are more commonly used. These differing arrangements reflect the capabilities of the hospital staff at different hospitals and the kinds of technologies being used.

Conceptually, an approach that would recognize this complicated reality would be to combine the payments for the surgeon's professional fee and the hospital service and let the hospital and surgeon divide those fees between themselves according to how the clinical staff is supplied and used. If the physician employs the clinical staff, then more of the payment would go to the physician than if the hospital employed the clinical staff. Payments would also be adjusted based on quality.

The quality of a surgery and its related pre- and postsurgical care could be measured as a whole; and the hospital and the surgeon would be held jointly accountable. Combining hospital and physician payments would make it possible for Medicare to reward good quality outcomes directly, and leave it to the participants in the care to divide the reward among themselves. For example, if the physicians and the hospitals determined that using additional or different clinical staff led to better outcomes, then they could use and pay for that staff and they would be rewarded for better quality. Although combining payments is a significant departure from current practice, it is consistent with the direction of the Commission to focus on payment for quality and to consider ways to improve care coordination. It would also serve as a useful reference point in considering future payment system changes. Of course, any change of this magnitude would require a number of issues to be resolved, such as antikickback concerns, quality measures, and current separately billable payments.

An approach of this sort is not without precedent. Starting in 1991, the Medicare participating heart bypass center demonstration paid participating hospitals a global rate for all inpatient hospital and physician services (not just surgery) for each discharge in two bypass DRGs. The demonstration saved Medicare and beneficiaries money and led to lower costs in the hospitals. Although quality improvement was not an explicit goal and payment was not linked to quality,

participants believed quality improved. Some hospitals shared savings with physicians; one hospital did so by converting surgeons' physician assistants in surgery and nurse specialists into hospital employees.[13]

In summary, practice expense RVUs for cardiothoracic surgery currently exclude the costs of bringing clinical staff to the hospital. This is appropriate for costs that are offset by other revenues, such as those for separately billable clinical staff, and arguably it is appropriate for all those costs that duplicate costs already accounted for in other payment systems. However, the technical approach for removing costs was limited by the data that were available to calculate practice expenses. When new data are developed for the forthcoming update of practice expense RVUs, those limitations should be addressed. Data that enable the appropriate calculation of clinical staff expenses both in the physician's office and in the hospital, including the ability to offset those costs for revenue derived from separate payment for clinical staff, should be a priority.

Sincerely,

Glenn M. Hackbarth, J.D.
Chairman

Identical letter sent to the Honorable J. Dennis Hastert

Enclosures

[13] Health Economics Research, Inc. 1998. *Medicare participating heart bypass center demonstration, Final report.* July 24.

Attachment 1: SEC. 644. MEDPAC STUDY OF PAYMENT FOR CARDIO-THORACIC SURGEONS.

(a) STUDY.—The Medicare Payment Advisory Commission (in this section referred to as the ‘‘Commission’’) shall conduct a study on the practice expense relative values established by the Secretary of Health and Human Services under the medicare physician fee schedule under section 1848 of the Social Security Act (42 U.S.C. 1395w–4) for physicians in the specialties of thoracic and cardiac surgery to determine whether such values adequately take into account the attendant costs that such physicians incur in providing clinical staff for patient care in hospitals.

(b) REPORT.—Not later than January 1, 2005, the Commission shall submit to Congress a report on the study conducted under subsection (a) together with recommendations for such legislation or administrative action as the Commission determines to be appropriate.

Attachment 2: How were resource-based practice expense payments derived?

CMS developed resource-based practice expense (PE) relative valve units (RVUs) using two data sources—the American Medical Association's (AMA) Socioeconomic Monitoring System (SMS) data and the Clinical Practice Expert Panel (CPEP) data. The basic methodology for developing resource-based payments for practice expenses has three steps:

- First, CMS estimated aggregate annual practice expenses for six different practice expense categories for each specialty.

- Second, CMS allocated each practice expense pool to the services provided by that specialty, based on estimates of the resources required to deliver each service. This step results in an estimate of the practice expense for each service provided by each specialty.

- Third, CMS averaged specialties' expenses for services provided by more than one specialty.

This methodology—also referred to as the "top-down" approach—assumes that current aggregate specialty practice costs are a reasonable basis for establishing initial estimates of relative resource costs of physicians' services across specialties.

CMS made a final adjustment to ensure that total physician payments were budget neutral—the same as they would have been under the previous payment system. The new PE RVUs were phased in with a four-year transition schedule established by the Balanced Budget Act of 1997. In January 1, 1999, PE RVUs were a sum of 75 percent of the 1998 charge-based PE RVUs and 25 percent of the resource-based RVUs. In each subsequent year, an additional 25 percent of the total PE RVU was resource-based until January 1, 2002, when 100 percent of the RVU became resource-based.

Deriving the practice expense pools. To establish the six practice expense pools, CMS used SMS data, which provided 1995–1997 practice expenses, by specialty and by expense category. The six expense categories or pools include three types of direct expenses: nonphysician clinical labor (such as nurses and medical technicians), medical supplies, and medical equipment; and three types of indirect expenses: administrative labor (such as an office manager or billing clerk), office supplies, and other expenses.

Each specialty's total practice expense pool by expense category was estimated by:

- Obtaining from the SMS survey, average expense per hour of physician time for each of the six expense categories, by specialty.

- Multiplying these hourly practice expense estimates by the total hours spent by all physicians in each specialty treating Medicare beneficiaries. The utilization data came from Medicare claims; the time data came from the AMA Specialty Society Relative Value Scale Update Committee and from surveys conducted by Becker, Dunn, and Hsaio (1988) during the development of the original fee schedule.

- Utilization data and physician time data for each service code were multiplied to determine the total number of physician hours spent treating Medicare beneficiaries, by specialty.

Allocating aggregate costs to specific services. CMS used different approaches to allocate direct and indirect costs to specific services.

- For direct costs—clinical labor, medical supplies, and medical equipment—CMS used the service-specific data derived by the CPEP. CMS convened the CPEPs—15 expert panels organized by specialty and comprised of physicians, nurses, and practice administrators—because no data source existed with the necessary information to allocate the aggregate pool of practice expenses to individual services. These panels estimated the direct resources used to deliver each service. Each panel's estimates were calibrated to the direct expense pools estimated with the SMS data.[1]

- For indirect costs—administrative labor, office expenses, and other expenses—CMS used the CPEP direct expense data (i.e., PE RVUs) as well as the physician work RVUs associated with a service in its methodology for allocating these expenses to individual services.

- Direct and indirect cost estimates are added together to determine total practice expense values per service for a specialty.

- For services performed by multiple physician specialties, the final allocation of PE costs for a given procedure is a weighted average of allocations for the specialists that perform the services. In this way, specialties that perform a given service frequently have more influence over the payment than specialties that rarely perform it.

[1] Specifically, the SMS pool is divided by the CPEP pool for each specialty to produce a scaling factor that is applied to the CPEP direct cost inputs. This process was intended to match costs counted as practice expenses in the SMS survey with items counted as a practice expense in the CPEP data. When the costs of clinical staff brought to the hospital were excluded, the scaling factor for cardiac surgery went from .36 to 2.22, a more than six-fold change.