



Pay for performance in Medicare

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Before the Committee on Finance U.S. Senate Chairman Grassley, Ranking Member Baucus, distinguished Committee members, I am Mark Miller, Executive Director of the Medicare Payment Advisory Commission (MedPAC). I appreciate the opportunity to be here with you today to discuss the Commission's recommendations to link payments to the quality of care in Medicare. I commend your leadership in this important new direction.

The Commission has concluded that change to Medicare's payment systems is urgently needed. The payment systems are neutral or negative to quality; for example, a hospital is paid more when a patient is readmitted to the hospital with an infection he acquired there. Other costs of poor quality include unnecessary illness, injury, disability, and death. It is time for the Medicare program to start to differentiate among providers when making payments. In our March 2004 and 2005 reports to the Congress, MedPAC discusses several important policy changes that differentiate among providers. Taken together, these changes will improve the quality of care for beneficiaries and lay the groundwork for obtaining better value in Medicare. While some providers have raised concerns about aspects of a pay-for-performance program, these concerns must be weighed against the costs of not moving forward: allowing the program to reward poor care and not recognize quality care.

Over the course of the last two years, the Commission has recommended that Medicare create incentives to improve quality through its payment systems. This approach builds upon the experience of private purchasers in designing and running pay-for-performance programs that refocus and reward health care providers for improving the quality of care. The Institute of Medicine and others have pointed to the quality gaps in the American health care system. While Medicare already has some programs in place to improve quality, these are not enough to orient the whole system towards improving quality; nor is it equitable for Medicare to pay a high quality provider the same as one that furnishes poor care. Because Medicare is such an important part of the American health care system, it can be very influential in transforming the incentives in the broad health care system—by making the business case for providers to improve quality of care.

CMS, along with accreditation and provider organizations, has played a critical role in building the infrastructure to move to pay for performance. The agency has identified and developed quality measures, collected standard data on quality, and published information on the performance of some providers. The agency also has developed demonstration programs to test various aspects of pay for performance.

MedPAC has concluded that Medicare is ready to implement pay for performance as a national program and that differentiating among providers based on quality is an important first step towards purchasing the best care for beneficiaries and assuring the future of the program. The Commission has also recommended that Medicare measure resource use of physicians and feed this information back confidentially to them. The Commission's agenda is to explore measurement of resource use and evaluate its use in pay-for-performance program. This testimony first provides a summary of our analysis of five settings—hospital, physician, home health, Medicare Advantage, and end-stage

renal disease—where the Commission has concluded that pay for performance is ready to move forward and then discusses the role of information technology (IT) in improving quality and the next steps for the program's evolution.

Criteria for deciding whether to move forward

The Commission studied dozens of private sector pay-for-performance initiatives to develop a framework to evaluate which settings were ready to move toward pay for performance. In each setting, we reviewed the types of measures available—outcomes, process, structural, and patient experience. Outcome measures report the results of care—whether the patient recovered, died, or improved function. Process measures capture the actions that providers take that are known, through clinical research, to improve outcomes. Structural measures tell whether the provider has the capacity to provide high quality care. And patient experience measures indicate dimensions such as satisfaction and understanding of the care process. Our framework uses the following four criteria to evaluate each setting:

- Measures must be based on clinical evidence, accepted by independent experts, and familiar to providers. While few individual measures can capture all dimensions of quality, they should identify meaningful differences in the quality of care that individual providers furnish.
- Collecting and analyzing data should not be unduly burdensome for either the provider or CMS. Many providers already report data to CMS; data that are already collected should be used when possible. The Commission has also identified additional measures that would improve quality measurement and make each setting ready for pay for performance, taking into account both the burden and the value of the additional information needed. Providers' capability to provide information should become better over time as clinical information technology improves.
- When outcome measures are used, they should be risk adjusted. Providers should not be financially penalized for the poorer outcomes of high-risk patients. However, even when risk adjustment is not adequate for outcome measures, Medicare can use process, structural, and patient experience measures, which generally do not need to be risk adjusted.
- Most providers should be able to improve on the available measures. The measures should identify aspects of quality where there is room for improvement because the goal of the program is to improve performance and differentiate among providers. The measures should capture an aspect of care that providers believe they can control. The number of measures should be sufficient to give a good picture of providers' overall quality. For example, only measuring whether a hospital gives aspirin after a heart attack probably does not capture enough of the quality of care to reflect the experience of many patients or many dimensions of their care.

As it used these criteria to analyze whether each of the settings was ready to move forward, the Commission also considered broad, cross-cutting questions on how a payfor-performance program would work best for Medicare. These design principles are intended to create a program that would improve quality of care for the most beneficiaries possible, minimize adverse consequences, and be fiscally prudent.

- The pay-for-performance program should reward providers based on both improving care and exceeding certain benchmarks. This achieves two goals: rewarding those who have already achieved high quality and encouraging improvement from providers with low initial scores. Only rewarding those providers who already provide the best quality might discourage lower-quality providers from making the effort to improve care. This approach—rewarding attainment and improvement—would improve the care for the most patients.
- Medicare should fund the program by setting aside a small share of payments in a budget neutral approach. The Commission concluded that a small share—starting with 1 to 2 percent of current provider payments—would be the least disruptive for beneficiaries and providers. The percentage set aside should increase as Medicare and providers gain more experience with pay for performance. The Commission intends for all of the money in the pay-for-performance fund to be paid out.

Some have suggested that this amount is not enough to encourage providers to change; others say this budget neutral approach will financially harm providers who do not perform well, and so discourage their participation in Medicare. Medicare is a large purchaser of care, making up a considerable share of some providers' revenues. Redistributing 1 to 2 percent of these revenues can represent a significant amount of funds to those providers with high performance. The percentage set aside to fund the pay-for-performance pool from each provider is small enough, however, that it should not disrupt access to care. The Commission undertakes an annual assessment of the adequacy of providers' payment amounts. This process would determine if payments are adequate for a provider setting (e.g., hospitals) as a whole. Pay for performance is an approach that, within that total payment pool, changes the distribution of funds to reward providers with the best performance.

Establish a process for continual evolution of measures. Evolution involves
considering new measures, dropping measures, and ensuring research is
underway to create or validate others. We describe the process we envision in
more detail later in this statement. It is important for such a consensus process to
develop common measure sets among private and public purchasers to reduce
provider burden.

What settings are ready to move forward to pay for performance?

Using the criteria listed above developed from discussions with private purchasers—available measures, reasonable burden, risk adjustment if necessary, and ability for providers to improve—the Commission recommended in its March 2004 and March 2005 reports that Medicare adopt pay-for-performance programs for:

- hospitals,
- physicians,
- home health agencies,
- Medicare Advantage plans, and
- dialysis facilities and physicians who treat dialysis patients.

CMS already has quality information for most of these settings that could be used as a "starter set" of measures. However, to ensure that measures capture a broader spectrum of quality for patients and types of providers, additional information would be needed, particularly for physicians. These measures with examples of each set are provided in the summary table (Table 1) at the end of the document.

Hospitals

A variety of quality measures are available for a hospital pay-for-performance program. More than 20 process measures, including the ten measures that hospitals already report to CMS, are one measure set (Table 2). Patient safety measures, for example pressure ulcer prevention programs, can be captured through a survey that is already being used by some purchasers. Two outcomes measures are also ready. Patient experience can be captured through another survey that will be ready soon. MedPAC recommended changes to the coding of diagnoses on the hospital claims to further expand the measures of hospital quality by allowing us to know whether complications or co-morbid conditions developed in the hospital or were present in the patient before he arrived.

Process measures are based on evidence showing that the type of care delivered increases the chances of positive patient outcomes. Examples of process measures include whether a patient was prescribed a beta blocker after being hospitalized for a heart attack or whether they received an antibiotic to prevent surgical infection. Providers also like these types of measures because they provide clear guidance on what processes need to be changed to improve quality.

Almost all hospitals report to CMS on one set of 10 measures (referred to as the annual payment update measures). In addition to these 10, hospitals participating in the Hospital Quality Alliance—a voluntary reporting initiative whose members include hospital organizations, CMS, the Joint Commission on Accreditation of Healthcare Organizations and AARP—are now reporting to CMS on an additional 12 measures, including several on preventing surgical infections.

We have fewer outcome measures for hospitals, but some information on mortality and rates of adverse events is available on claims or from other administrative data. Two widely endorsed mortality measures—those for acute myocardial infarction and coronary artery bypass graft—could be part of an initial set. Safety, as measured by the rate of adverse events, is a critical component of quality in hospitals, but we need more detailed

information on the billing claim that is used to calculate these measures to be able to hold hospitals accountable for adverse events (for example, pressure ulcers or complications) that occurred in the hospital, rather than for conditions that were present in the patient before he arrived. To allow for this distinction, the Commission recommended that CMS require hospitals to identify which secondary diagnoses were present on admission and submit this information to CMS on its billing claims forms.

Other measures that could be added in the near future include safe practices and patient experience of care. Safe practices, which include pharmacist participation in medication use and pressure ulcer prevention programs, can be assessed through a survey already used by the Leapfrog Group based on National Quality Forum-endorsed practices. Patient experience of care can be assessed through a hospital version of the Consumer Assessment of Health Plan Survey, known as H-CAHPS. It assesses patients' experiences, for example with nursing care and understanding of side effects of their medications.

Physicians

Because physicians are central to the delivery of all types of health care, their participation in a pay-for-performance program is essential. Measures are available for many types of physician specialties. However, measuring physician quality is more complex than measuring quality in other settings because of the lack of data, the wide variety of specialized services, and the number of physicians. These complexities led the Commission to recommend a two-step implementation strategy for physicians.

The first step would have physicians report on whether they have certain IT functionality, that is how their information systems track and follow-up with their patients. Examples of these types of measures include: whether physicians had patient registries to identify and track patients with coronary artery disease, or whether physicians treating patients in hospitals took responsibility for ensuring that patients received their recommended follow-up. These measures would apply across all types of physicians. The measures may best be achieved through using advanced clinical information technology, so they would also encourage providers to adopt IT. Doing so would also help move to the second step by building the infrastructure necessary to measure and improve processes of care.

These IT functionality measures would reward the quality outcomes of using IT, rather than simply the purchase of a system. Physicians would not have to purchase fully operational electronic health records; less sophisticated technology could be used to create patient registries. Although physicians' assessment of their ability to track their patients would be a new task for most physicians, there are precedents. An NCQA recognition program requires physician offices to report on their IT functionality through a Web-based data collection tool. CMS is also emphasizing these practices though the Quality Improvement Organizations and the Medicare Care Management Performance Demonstration.

The second step, two to three years later, would move to measuring physicians' clinical processes of care for different health conditions. While many of these measures are

available and are already being used in private purchasers' pay-for-performance programs, they are not yet available for every type of patient or physician. To encourage specialty societies and others to speed development of these types of measures, Medicare should establish a date certain when all physicians will be measured on their performance on processes of care relevant to their patients.

The Commission suggests that, at least initially, the source of data for these process measures be claims, as these are the least burdensome to physicians. While claims-based process measures are not available for every type of condition or specialty, researchers at RAND are finding that they are available for many conditions of importance to Medicare beneficiaries and physicians. Claims data would be an even better source for quality measures if they were linked to prescription (from the Part D program when available) and laboratory value data (obtained through laboratories). The Commission recommended that these data be collected and linked with physician claims to improve quality measurement. Additional process of care measures can be derived from medical record abstraction, flow sheets, or electronic health records.

Home health care

Home health care has a ready set of outcomes measures that are already collected and have good risk adjustment. Outcome measures from CMS's Outcome-Based Quality Indicators set could form the starter set of pay-for-performance measures. The National Quality Forum, Agency for Healthcare Research and Quality (AHRQ), and an expert panel convened by CMS concur that a set of these measures are reliable and adequately risk adjusted. They pose no additional data collection burden because they have been collected and computed by home health agencies and CMS since 1999. Risk adjustment is supported by data on patient prognosis, functional status at the start and completion of care, multiple diagnoses, and behavioral and cognitive status.

The evolution of home health care quality measurement should include the addition of valid, reliable, and adequately risk-adjusted functional stabilization scores and adverse event measures. Though the goal of care for many home health patients is improvement, some home health care is intended to prevent decline in patients who could not be expected to improve. Stabilization measures could be indicators of how well agencies are meeting the needs of such patients in addition to the needs of patients who are improving.

More work is needed to develop measures related to adverse events such as falls in the home or potentially dangerous dehydration, which are rare but can be very dangerous to patients. The rarity of adverse events in the home health setting, compared to functional improvement or stabilization, makes adverse events more difficult to risk adjust. Adding improved adverse event measurement to the set of indicators used for pay for performance would be a good next step because they reflect patient safety, an important indicator of the quality of care. Measures of processes related to patient safety could also be added.

Medicare Advantage

Medicare Advantage (MA) plans are ready for pay for performance because measures are developed and already collected. CMS has been providing the public with information regarding the quality of MA plans for several years and plans have shown that they are able to improve on the measures. However, some plans perform far better than others on the reported measures. In fact, room for improvement exists on all of them, making stronger incentives for improvement important for MA plans.

CMS has information on all plan scores through the Consumer Assessment of Health Plans Survey (CAHPS). CAHPS measures member satisfaction with the plans' provision of services. They also report on the Health Outcomes Survey. In addition, although all plans do not report on all Health Plan Employer Data and Information Set (HEDIS) outcome and process measures, all plans report on some of them. These measures include such services as immunization and screening rates.

Because they are process measures, the HEDIS set does not require risk adjustment. Adjustment is available for the CAHPS measures of patient experience, based on the correlation between certain demographic factors and patient satisfaction. Plans have developed a variety of strategies to improve their scores on these measures; but improvement is still possible as performance varies from plan to plan.

End-stage renal disease (ESRD): dialysis facilities and physicians who treat dialysis patients

Dialysis facilities and physicians who treat ESRD patients are ready for pay for performance because well-accepted measures are already collected. Among the publicly reported measures, those for dialysis adequacy and anemia have improved. However, current quality improvement activities have not uniformly improved these outcomes for all patients. Furthermore, other aspects of care, such as mortality and hospitalization rates have shown little improvement.

MedPAC found that the physicians who treat dialysis patients and for whom Medicare makes a monthly capitation payment should also be paid in part based on their performance on managing their dialysis patients. This will focus both the facilities and the physicians who treat dialysis patients on improving patient care on the same set of measures.

Pay for performance could include measures of dialysis adequacy and anemia management. CMS has collected data on these measures from dialysis facilities since 1999. These measures do require risk adjustment, but information on patient characteristics that affect outcomes is available and would provide adequate risk adjustment.

Additional measures for pay for performance for the future could include those for nutritional management, vascular access care, bone disease management, and use of home dialysis.

The role of information technology

In all settings, better use of IT would decrease the burden of reporting quality information and facilitate improvement efforts. Recommending that Medicare include functions of IT systems in physicians' offices is a first step; this notion should be expanded to other settings where IT can both improve quality reporting and quality outcomes. Including IT use in pay-for-performance programs will improve the return on investment for purchasing IT and will make an ongoing business case to providers to continue to use the IT as a part of the care process.

The Commission has focused on promoting IT through pay for performance based on a review and analysis of the barriers and current extent of adoption of IT. The acquisition of IT alone does not necessarily lead to its use. Even more importantly, acquisition alone does not lead providers to use it to change care delivery to improve quality, which is the desired outcome. By contrast, the Commission's recommendation to differentiate payment based on quality performance focuses on the objective of improved quality, not simply the purchase of an IT system. In addition to improving the return on investment for IT, focusing on the objective—better quality—provides guidance to physicians and vendors about how the IT systems should be designed and used.

The Federal government also is involved in important activities to standardize products and the language used in IT to enhance interoperability. These activities address other barriers to adoption and are an important complement to providing financial incentives through pay for performance.

Moving towards the future

The Commission sees several important additional future directions for pay for performance. These include developing a process for continually improving measure sets, developing measures for additional settings, developing and potentially integrating measures of resource use into pay for performance, and developing measures to capture coordination of care.

After Medicare chooses an initial measure set to start the pay-for-performance program in each setting, it will need to improve and adapt measure sets over time. Improving measure sets involves considering criteria for new measures, dropping measures, and ensuring that research is under way to create or validate others. Medicare would also need to evaluate the adequacy of risk adjustment in new and existing measures. A single entity could bring together government agencies (e.g., AHRQ), purchasers (e.g., the Leapfrog Group), providers (e.g., physician specialty societies), health services researchers, and performance measure development groups (e.g., the Hospital Quality Alliance) to inform the evolution of measures and make recommendations to CMS. One goal of this process should be to ensure coordination among private and public purchasers to agree on common measures and thereby reduce the burden on providers to report them.

The Commission recommended a pay-for-performance program focused on improving quality. However, in the private sector many pay-for-performance incentives are also

aimed at improving efficiency—the interaction between the resources used to deliver care and the quality of the product. MedPAC is evaluating the potential to include measures of both quality and resource use in a Medicare pay-for-performance program. Private sector initiatives also are looking at measures of longitudinal efficiency, that is, the extent to which providers provide high quality and lower resource use over longer periods of time. Ultimately, we want to be able to reward efficiency and quality for more meaningful periods of time than individual admissions or visits; examples of these periods are an acute episode of care or six months of chronic care. Measures of longitudinal efficiency would reward providers for providing care right the first time and those who assure effective handoffs among different providers and settings.

Pay-for-performance programs should also evolve to reward providers in other settings, particularly where there are concerns about quality and where many patients use the setting. The Commission concluded that more measures are needed to capture the quality of skilled nursing facilities; we will look at what is needed for this setting to move to pay for performance in the coming year.

Linking payment to quality within a setting does not necessarily enhance coordination across settings. Many quality problems happen as patients move from setting to setting. For example, when a hospital discharges a patient home without the necessary clinical information, she could receive the wrong medication. Measures of care coordination that would align provider incentives across settings are another priority for development.

MedPAC plans to look at the last three issues as part of its agenda and expects to report out to the Congress in these areas in the future.

Conclusion

In conclusion, the Commission has recommended linking payment to quality through pay-for-performance programs in Medicare. We recognize that doing this requires the program and providers to change and raises some issues. On net, however, the Commission's judgement is that the benefits of moving forward outweigh the costs of remaining at the status quo. Medicare's role in this area is critical to move the health care system forward to provide better quality of care. Pay for performance will also address an inequity in the current payment system: paying the provider who gives his patients better care the same as the provider who does not.

TABLE 1		Summary of potential pay-for-performance measure sets, by setting	measure sets, by setting
Setting	Type of measure	Example	Data source
Hospitals	Process	Heart attack patients discharged with prescription for beta blockers	Medical records
	Structure	Safe practices: Existence of pressure ulcer prevention programs	Web-based survey
	Outcomes	Mortality (CABG, AMI), adverse events	Claims
	Patient experience	H-CAHPS: Whether patient understood the risk of their medication	Survey
Physicians	Structure	IT functionality: Whether the office has in place systems (e.g. patient registries) for tracking and following up on patients	Web-based survey
	Process	Diabetic patients who receive certain diagnostic services (e.g. HbA1c tests)	Claims
	Outcomes	Diabetic patients with good blood sugar control	Claims (with laboratory and prescription claims)
Home health agencies	Outcomes	OBQls: Patients who improved their ability to walk	OASIS assessment tool
Medicare Advantage plans	Process Potient experience	HEDIS: Breast cancer screening	Medical records and claims
	Outcomes	HOS: Patients whose health status improved	Survey
Dialysis facilities and physicians	Outcomes	Patients with adequate dialysis	Medical records or daims
	Process	Patients with fistula	Medical records or daims

Note: CABG (coronary artery bypass graft), AMI (acute myocardial infarction), H-CAHPS (Hospital-Consumer Assessment of Health Plans Survey), IT (information technology), HbA1c (hemoglobin A1c), OBQI (Outcome-Based Quality Indicators), OASIS (Outcomes Assessment Information Set), HEDIS (Health Plan Employer Data and Information Set), CAHPS (Consumer Assessment of Health Plans Survey), HOS (Health Outcomes Survey).

Source: Analysis from MedPAC's 2004 and 2005 Report to the Congress: Medicare Payment Policy.

TABLE 2

Many hospital process measures are endorsed or collected for multiple purposes

Hospital quality measures	APU	HQA	JCAHO	Premier Demonstration	NQF	QIO
Acute myocardial infarction (AMI)						
Aspirin at arrival	1	1	1	✓	/	1
Aspirin prescribed at discharge	/	1	/	/	/	/
ACE inhibitor for LVSD	/	/	/	/	/	/
Adult smoking cessation advice/counsel		1	/	/	/	/
Beta blocker at arrival	/	1	/	/	/	/
Beta blocker at discharge	/	/	/	/	/	/
Mean time to thrombolysis			/			/
PCI received within 120 minutes of arrival		/	/			/
Thrombolytic agent received						
within 30 minutes of arrival		/	1	/	1	/
Inpatient mortality			/	/	/	
CABG mortality					/	
AMI test measures only				·	•	
LDL cholesterol assessment						1
LDL cholesterol testing						•
within 24 hours after arrival						1
Lipid-lowering therapy at discharge						1
Heart failure						•
Discharge instructions		1	/	/	1	1
Left ventricular function assessment	1	/	/	,	/	/
ACE inhibitor for LVSD	· /	/	/	,	/	/
Adult smoking cessation advice/counseling	·		/	,	/	1
Pneumonia		•	·	•	·	•
Oxygenation assessment	1	1	/	✓	1	/
Pneumococcal vaccination	1	1	/	/	/	1
Blood cultures performed within 24 hours	•	•	·	•	·	•
before or after arrival						./
Blood cultures performed before first antibiotic		1	/	/	1	./
Adult smoking cessation advice/counseling		/	./	./	/	./
Antibiotic timing (mean)		•	./	•	•	•
Initial antibiotic received within 4 hours of arrival	1	/	./	1	1	./
Initial antibiotic selection for	•	•	•	•	•	•
community-acquired pneumonia		1	1	✓		./
Influenza vaccination		./	./	./	./	./
Surgical infection prevention		•	•	•	•	•
Prophylactic antibiotic received						
within 1 hour prior to surgery		/	,		,	,
Prophylactic antibiotic selection		•	•		•	•
for surgical patients		,	,		,	,
Prophylactic antibiotics discontinued		•	•		•	•
		,	,		,	,
within 24 hours after surgery end time		/	1		/	•

Note: APU (annual payment update), HQA (Hospital Quality Alliance), JCAHO (Joint Commission on Accreditation of Healthcare Organizations), NQF (National Quality Forum), QIO (Quality Improvement Organization), LVSD (left ventricular systolic dysfunction), PCI (percutaneous coronary intervention), CABG (coronary artery bypass graft), LDL (low-density lipoprotein), ACE (angiotensin-converting enzyme). QIO measures are from the 7th scope of work.

Source: MedPAC analysis, based on material prepared by the lowa Foundation for Medical Care, from MedPAC's 2005 Report to the Congress: Medicare Payment Policy.