CHAPTER 7

Using incentives to improve the quality of care in Medicare

RECOMMENDATION

The Secretary should conduct demonstrations to evaluate provider payment differentials and structures that reward and improve quality.

***YES: 15 • NO: 0 • NOT VOTING: 0 • ABSENT: 2**

***COMMISSIONERS' VOTING RESULTS**

CHAPTER 7

Using incentives to improve the quality of care in Medicare

In this chapter

- How incentives relate to improving health care quality
- Private sector use of incentives
- Applying incentives to improve quality in Medicare
- Examples of private sector efforts to use incentives to improve quality

One of Medicare's most important goals is to ensure that beneficiaries receive high-quality health care. Medicare already uses nonfinancial incentives and other tools for improving quality, but generally the current payment system fails to financially reward plans or providers who improve quality. Medicare beneficiaries and the nation's taxpayers can not afford for the Medicare payment system to remain neutral towards quality. MedPAC recommends that Medicare pursue demonstrations of provider payment differentials and revised payment structures to improve quality. The program should focus its efforts to improve quality in three areas: (1) settings that offer ready measures and standardized data collection—Medicare+Choice plans and inpatient rehabilitation facilities; (2) settings—such as hospitals and physician offices—that affect a large number of beneficiaries; and (3) care delivered across settings.

Medicare has a responsibility to ensure access to high-quality care for its beneficiaries. Yet Medicare beneficiaries receive care from a system known to have quality problems. While care is improving in several settings, significant gaps remain between what is known to be good care and the care delivered (Jencks et al. 2003). Studies documenting the gap between high-quality care and the care currently delivered have called attention to the need for improvement. The safety of patients, particularly in hospital settings, is also of concern (IOM 2000).[1]

At the same time, measures of quality and guidelines for appropriate care are becoming increasingly available. The Medicare program has been a leading force in these efforts to develop and use quality measures, often leading initiatives to publicly disclose quality information, standardize data collection tools, and give feedback to providers for improvement. CMS has also revised its regulatory standards to require that providers, such as hospitals and home health agencies, have quality improvement systems in place. CMS's focus on quality provides a strong foundation for future initiatives.

While Medicare already uses many tools for improving quality, the lack of financial incentives and the presence of disincentives to improve quality allow the quality gap to persist (IOM 2001). In the Medicare program, the payment system is largely neutral or negative towards quality. All providers meeting basic requirements are paid the same regardless of the quality of service provided. At times providers are paid even more when quality is worse, such as when complications occur as the result of error. In the Medicare+Choice (M+C) program, some types of plans are held to higher standards than others, but paid the same, potentially creating disincentives for investing in quality.

The mechanism of fee-for-service payment also leads to fragmented care delivery. This is particularly problematic for the increasing number of Medicare beneficiaries living longer with one or more chronic conditions who need management of care across settings and at home.

Some of these negative or neutral incentives also exist in the private sector. Many private purchasers and plans are experimenting with mechanisms to counterbalance these forces and reward those who provide high-quality care. Yet they all agree that Medicare's participation in these efforts is critical.

To develop strategies for Medicare to further use incentives, we interviewed a wide spectrum of quality experts, plans, providers, and purchasers. We found that many private sector purchasers and plans are beginning to use financial and nonfinancial incentives to improve quality. We also found that Medicare is using several nonfinancial incentives and building the infrastructure necessary to implement financial ones.

We conclude that Medicare must find ways within its current payment systems and explore alternative payment structures to reward quality providers and encourage better coordination of services across settings. Further, the Commission believes that these efforts should focus on three specific areas:

- settings with a ready environment for tying quality measures to payment incentives—Medicare+Choice and inpatient rehabilitation facilities. Both settings have well-developed and accepted sets of measures and standard data collection tools, and both present opportunities for improvement on a variety of aspects of care. In addition, groups of providers from those settings have proposed strategies for distributing payment based on those measures.
- settings where improving quality affects a large number of Medicare beneficiaries—hospitals and physician offices. They present many opportunities for improvement and affect many beneficiaries. For hospitals, many measures are available, including those used in CMS's recently announced voluntary public disclosure initiative with the private sector. CMS could link one set of measures, or a combination, to incentives in a demonstration. Measures useful for comparisons at the individual physician office level are limited. However, the agency could link incentives to measures in specific domains of care or to measures applied at a group practice level. Incentives for both physicians or hospitals could also be based on participation in data collection or public disclosure efforts.
- across settings to encourage better collaboration and coordination between providers. Strategies to build incentives into fee-for-service (FFS) payment mechanisms and to develop alternatives to FFS payment should be explored to encourage the development of organized systems of care capable of managing all aspects of a patient's care across settings and time.

In addition to identifying CMS's key priorities, we discuss the reasons incentives are useful for stimulating action, findings from our analysis of current private and public sector use of incentives, and strategies for addressing any unintended consequences resulting from implementing these types of incentives in the Medicare program. The last section of the paper discusses private sector use of incentives, including illustrative examples.

1 The Commission believes that assuring the safety of care is part of the goal of improving quality. Therefore, in this chapter we describe it as one component to consider in developing strategies to improve quality.

How incentives relate to improving health care quality

The need to improve the quality of health care is widely acknowledged. A growing body of evidence finds that health care is inappropriately used throughout the system (Fisher et al. 2003, IOM 2001, Wennberg et al. 2002) in both low- and high-utilization regions (Chassin et al. 1987). How health care is delivered depends on where someone lives, how many specialists are in their area, as well as how effectively well-known and evidence-based protocols are used. Under use, overuse, and unsafe practices appear to occur in all areas of the country and in all settings of care.

These problems occur along two dimensions. First, some care in individual settings does not meet appropriate clinical standards and is unsafe. Second, health care is fragmented and uncoordinated across settings. This disjunction is particularly important to older and disabled persons with multiple chronic conditions who may benefit from care designed to coordinate treatment regimens. Many suggest that, absent broad system changes, goals for improvement will not be reached (IOM 2001) (see text box below). Strategies using incentives to improve quality must strive to encourage these system changes.

System changes to support quality improvement

While providers are motivated individually to provide the best care possible, the organization and incentives they work within often make it difficult to do so. Incentives to improve quality must build on the commitment of individuals and help create system support for delivery of the best care possible. Below are several key organizational supports for system change.

Leadership commitment to a culture of quality and safety Quality performance needs to be included as a regular topic of discussion at boards of directors and medical staff meetings. In addition, it could be used as criteria for evaluating effective management. This commitment will encourage more formal and informal mechanisms to be implemented to improve quality, such as the blame-free environment and information technology.

Blame-free environment Effective quality improvement, especially on safety-related problems, relies on a blame-free environment. To reach quality goals, the organization will need to "break down the authority gradient" and encourage health professionals as well as less-trained and -educated health care workers to identify problems and make suggestions to fix them (Weeks and Bagian 2003).

Information technology to measure and improve care Having the appropriate information available at the right time to make informed decisions is key to delivering quality health care. In health care, crucial decisions rely on a continually shifting information base. It is critical to move beyond our memory-based system. Incentives for quality encourage providers to invest in the computer-based systems to track and use the myriad of clinical information available and necessary to deliver high-quality care. Some providers are already investing in several forms of technology:

- Electronic medical records (EMRs). Often described as the silver bullet of health care quality, the use of an EMR to store and make available information on a patient's past medical history, lab reports, and medications makes it possible for physicians and other health professionals to make better-informed decisions regarding care. Clinical pathways can also be embedded within an EMR. In addition, they allow an organization to measure and benchmark their care against other organizations and the care provided by numerous departments and personnel within their setting. These tools could also make coordinated care across settings possible when, and if, data definitions are standardized.
- Management tools. Examples such as patient registries, clinical reminder systems, computerized provider order entry, and bar coding help clinicians manage a specific aspect of care.[1] Without patient registries or reminder systems it is difficult for physicians to identify patients in need of certain tests or exams. Without some form of computerized prescription ordering, those in the chain of decision making may not notice a contraindication for a specific patient, or that the dosage ordered is not the dosage produced from the pharmacy.
- Patient communications. E-mail communications with patients have been found to increase patient satisfaction and decrease the number of visits patients make to the practitioner (American College of Physicians 2003). Devices used in patients' homes to monitor their health can make it easier for the patient to monitor their own condition and help identify the need for a medical intervention. ■

1 These management tools are often embedded in an electronic medical record, but are also available on their own.

Why incentives are needed

The largest purchasers of health care—including Medicare as the single largest purchaser—often fail to reward and sometimes penalize plans or providers who make the changes necessary to improve quality. In Medicare, for example, plans and providers furnishing higher-quality care are paid no more than those furnishing lower-quality care. In fact, if a hospital reduces readmissions or complications, total payments might decrease. Geographic variations in care patterns we note in Chapter 1 are evidence that the payment system and incentives for quality are not aligned.

Furthermore, the health care market often fails to reward high-quality providers with higher volume. For many consumer goods, consumers can make their own educated choices based on multiple purchases and assessments of similar goods from different vendors. For other expensive consumer goods, reliable sources of comparative information exist. By contrast, health care consumers generally can not gather their own information on the comparative quality of providers, and often they do not have useful comparative information from other sources (Mehrotra et al. 2003, Shaller et al. 2003). If consumers can not make their choices based on the quality of providers, then high-quality providers can not be rewarded with higher volume.

Finally, when an entity makes improvements that decrease overall health care costs, often the resulting savings do not go to the entity that made the investment. If a physician group practice improves its protocols for managing diabetic patients, the result is often fewer hospitalizations. Yet, although the group practice invested the time and resources into improving care (without higher payments), the savings would go to the Medicare program.

In addition to the lack of incentives to improve care within settings, payment on a FFS basis does not support or encourage health care providers to work with each other and the patient to deliver high-quality care across settings and episodes of care. The payment system provides no reward for those providers who act on their own or with others to provide such care.

Purchasers' use of incentives for quality can counterbalance these negative or neutral signals providers and plans are currently receiving. Nonfinancial incentives, such as public disclosure of setting-specific information, could reward high-quality providers with increased volume, thus increasing revenue. Financial incentives could help providers benefit from savings that accrue elsewhere in the system, differentiate payments for high- and low-quality care, and reward those who seek to improve coordination. Although acting through different mechanisms, these incentives all work toward the objective of improving the quality of care for the most patients.

What kind of incentives are possible?

Through discussions with public and private sector purchasers and plans, we identified the following types of incentives that could be used, or used more broadly, by Medicare to encourage improvements in the quality of care beneficiaries receive. Of the incentives listed below, public disclosure, provider payment differentials, and to a lesser extent, cost differentials for enrollees were most commonly used in the private sector. The most common incentive in the Medicare program is public disclosure. However, CMS is developing many of the tools necessary to implement financial incentives and experimenting with other types of incentives such as shared savings and risk sharing.

- Public disclosure. Disclosing quality information on individual providers improves care in two ways. First, because providers want their performance to be as high as possible, they may improve their care. Second, volume may shift to the higher-performing providers, the result being that more beneficiaries receive better-quality care.
- Payment differentials for providers or plans. Paying providers or plans bonuses or higher payments for performance on quality measures benefits those who make the changes necessary to improve care.
- Cost differentials for beneficiaries. Requiring lower cost-sharing amounts for enrollees for plan premiums or lower copays for going to higher-quality providers encourages more enrollees to choose them. These incentives encourage plans and providers to improve quality, because greater volume and good publicity could follow from the cost-sharing differences.[2]
- Flexible oversight. This strategy for encouraging providers to improve the quality of care involves identifying potentially less burdensome regulatory requirements if an organization demonstrates a high level of performance or effort. This would reduce providers' costs of complying with government or purchaser requirements.
- Shared savings. By calculating savings from quality improvements and sharing them with those who invested the resources to improve quality, providers would want to improve. This strategy assures providers a return on their investments.
- Risk sharing and capitation. These payment mechanisms provide incentives for better overall

2 An increase in patient volume may not always increase revenue. For example, if a hospital decreases complications it may result in lower lengths of stay and a greater availability of hospital beds. However, if the hospital sees a large volume of patients who are unable to pay the costs of their care, increasing patient volume may not increase revenue. In addition, if beneficiaries pay lower cost-sharing amounts, and the Medicare program does not make up the difference, the provider may lose revenue.

management of care across settings and time. These payments can apply to management for specific conditions or bundles of services, or for a period of time to cover beneficiaries' entire healthcare use.

Private sector use of incentives

Through our interviews we find that many purchasers and plans are experimenting with incentives for improving quality. Purchasers believe that many of these are effective. These efforts also reveal criteria for choosing effective measures that Medicare can use to best focus its resources and identify additional research needs.

The most prevalent incentives are public disclosure, payment differentials for providers, and cost differentials for beneficiaries. We find few examples where private purchasers or plans use shared savings or risk-sharing payment methodologies to improve quality. We do, however, find that private purchasers and plans often target their incentive initiatives at organizations—either group practices, networks, or health plans that use capitation or other forms of risk sharing—that they believe are more effective at improving quality. The payment structure for these organizations makes it possible for them to better coordinate care and track results than plans or individual providers paid on a fee-for-service basis. We also find one very good example of shared savings, but it may be difficult to reproduce in other settings.

The credibility of the information for comparing providers and plans is probably the most important factor in determining whether financial incentives—particularly those focused on enrollees—are possible to use for improving quality. Thus, most of these initiatives use well-accepted measures with existing mechanisms for data collection. Many purchasers and plans couple information on quality with information on costs when identifying those eligible for rewards. Those purchasers and plans implementing incentives also face other difficult design issues, such as insufficient market share to obtain provider buy-in, or uncertainty about whether additional dollars or current payments would finance incentives.

In this section we discuss the criteria for identifying and using effective measures, and discuss key issues purchasers and plans face when designing and implementing various incentives. The last section in this chapter provides examples of the different types of incentives.

Choosing effective measures

The most important and difficult aspect of designing an incentives program is identifying appropriate measures. Conclusions from our interviews are formulated here as criteria Medicare could use to identify the most promising settings and types of care delivery practices for implementing incentives. While no setting's or delivery practice's quality measures will meet all of these criteria perfectly, the plans, providers, and purchasers say that all of these issues must be addressed in some fashion.

- To be credible, measures must be evidence based to the extent possible, broadly understood, and accepted. Evidence must show the process or structure measured is important to achieving the most desirable outcomes, and the measure itself should be valid and reliable. The data collection should be reliable and consistent across providers.

  Measures developed by third parties, especially voluntary organizations with many stakeholders, gained broad acceptance in the private sector. In one example, the measures of quality of care for diabetes were based upon the best practices developed by the American Diabetes Association, and used by the National Committee for Quality Assurance (NCQA) in its provider recognition program. To build understanding and acceptance for its measures, the private sector gave individual providers report cards to compare their performance with their peers before attaching an incentive to the scores. Providing feedback privately gave the provider the opportunity to identify and improve on problem areas before facing public scrutiny.

- Most providers and plans must be able to improve upon the measures; otherwise care may be improved for only a few beneficiaries. If the criteria for earning a reward is so demanding that providers or plans perceive it to be beyond their reach, then they may do nothing at all. Yet, a bar set too low may also fail to stimulate action among the majority of providers or plans. In either case, the measure would not meet the goal of improving the quality of care for many or most beneficiaries.

- Incentives should not discourage providers from taking riskier or more complex patients. For example, characterizing the quality of providers on the basis of the proportion of their patients who died or developed complications could make complex patients less attractive to providers. Since the accuracy of current case-mix adjustors is often questioned, purchasers and plans avoid indicators of quality such as outcomes measures in some settings that would require such an adjustment.[3] Instead they use process or structural measures less likely to be affected by the complexity of the patient, such as the provision of preventive services or whether a hospital uses intensivists in its intensive care units (ICUs). Patient satisfaction, one measure of the

3 Avoiding outcomes measures is not a useful strategy in all settings. For example, dialysis and inpatient rehabilitation facilities and some M+C plan quality measures are based on outcomes of patient care.

outcome of care which is not as dependent on case-mix adjustment, is also widely used.

- Obtaining information to measure the quality of a plan or provider must not pose an excessive burden on any of the parties involved. To the extent possible, measures should be based on data collected as a routine part of care delivery or for multiple purposes. For example, home health agencies collect Outcomes and Assessment Information Set (OASIS) information for payment purposes, but it is also useful for measuring the functional improvement of patients. Data to construct measures for quality incentives could also come from information collected for private accreditors such as the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), NCQA, or other private sector employer or health plan initiatives.

Which types of incentives are most used?

The incentives used most often in the private sector are public disclosure, payment differentials, and enrollee cost differentials. In fact, a progression from nonfinancial incentives to financial incentives seems to be a common path.[4]

- **Provider feedback and public disclosure.** Most of our sources began the movement to financial incentives with projects designed to provide feedback to providers or to publicly disclose information on specific ones. This phase establishes the credibility and acceptance of the measures, develops the process for data collection, and creates enrollee and provider expectations that information on specific providers or plans will be made available. Plans and purchasers address concerns regarding risk adjustment and gain knowledge of providers' or plans' ability to improve on the measures. These strategies lay the groundwork for financial incentives while improving quality.

- **Financial incentives.** Many organizations find public disclosure and feedback to providers do not achieve sufficient improvement. They then design financial incentives around the measures used for internal improvement or public disclosure. Although many organizations believe establishing incentives for providers before doing so for enrollees or consumers is the most effective strategy, some organizations go directly from public disclosure to enrollee incentives. Organizations that implement consumer incentives without doing so for providers say that they do so under the assumption that if more enrollees go to certain plans or providers, increased volume will act as a financial incentive for the provider or plan.

Other important incentives include shared savings and shared risk or capitation arrangements. Although these incentives are less commonly used—most incentive programs involved payment for quality in the context of FFS—many interviewees were interested in the potential for both to address the broader quality challenge of ensuring coordination of care across settings. The limited use of capitation as a quality incentive may say less about its potential to improve quality and more about the current state of the health care market and its reliance on broad, loosely organized networks of providers.

What were the results?

Private purchasers and plans that have implemented these various incentives found both cost savings and improved quality. While many of these initiatives are still in the design phase, several have been implemented. The examples below represent only a few of the many purchasers and plans that cited improvements resulting from their incentive initiatives.

Disclosing information publicly on groups or individual providers changed provider behavior but less often changed patient choices. In New York, four years after the public release of information on hospital and physician risk-adjusted mortality rates, state deaths from cardiac surgery fell 41 percent. However, patients did not appear to use the information to choose higher-scoring providers (Chassin 2002). One place where releasing information to enrollees did result in enrollees shifting to higher-scoring providers was PacifiCare, a health plan in California. PacifiCare found that by releasing information on the quality of physician groups at the time of open enrollment, 30,000 enrollees chose the higher-quality physician groups. In addition, of the 41 measures reported, 22 showed improved mean performance and reduced variation across provider groups.

Paying providers differently based on their quality performance also seems to encourage providers to improve quality. Empire Blue Cross Blue Shield formed a group with several of its large employer clients to provide bonuses to hospitals that implement two structural systems known to improve the quality and safety of hospital care: (1) computerized physician order entry (CPOE) and (2) staffing intensive care units (ICUs) with physicians who have qualifications in critical care medicine. In 2002 the number of hospitals with which they contracted to implement both improvements increased from 10 to 50. The Employers Coalition on Health in Rockford, Illinois provided monetary bonuses for its physician groups that improved care for their diabetic patients. After only one year, the coalition was able to raise the bar for the bonus from 60 to 65 percent of patients meeting target hemoglobin levels.

4 This progression was not conscious; the employer or plan did not intend to create buy-in for the eventual goal of using financial incentives. Often the progression took a number of years.

Cost differentials for enrollees are usually designed to lower costs to the enrollees when they choose a preferred health plan or when they seek care. Many of these initiatives are still in the planning stage. However, General Motors (GM) has found that providing its salaried employees and retirees enrolled in HMOs lower premiums based on quality and cost information has resulted in employees choosing higher performing plans, which are generally lower cost. The result: more employees receiving care from higher-quality plans and cost savings for GM and its employees of $5 million in 2001.

Applying incentives to improve quality in Medicare

Historically, except for conditions of participation for providers and plans and limited utilization review, the Medicare program has relied on providers to ensure that beneficiaries received high-quality care. This was, in part, because the original statute directed the program to leave decisions regarding care delivery to providers and because few measures or guidelines for quality had been developed at that time. More recently, Medicare has taken a strong, proactive approach towards the quality of care, seeking to continually improve care for beneficiaries.

Recognizing that an inspection approach focusing on individual poor performers would only improve care for a few beneficiaries, CMS reengineered its peer review organization program in the early 1990s to work to improve the overall level of quality beneficiaries receive, especially in hospitals. This shift to what is now called the quality improvement organization (QIO) program has resulted in the development of numerous quality measures and an infrastructure to assist providers to improve. The agency's public reporting initiative has provided a strong impetus for quality improvement for M+C plans, dialysis facilities, nursing homes, and most recently, home health agencies. The Commission strongly supports these efforts to measure and improve care and believes CMS should continue to expand public reporting of provider quality and use of the QIOs to assist providers in improving quality.

In this section we describe Medicare's current efforts to measure and improve quality, and conclude with a recommendation that CMS explore the use of provider payment differentials and alternative payment structures to improve quality through its demonstration authority. The Commission identifies three priority areas for the Medicare program: (1) settings where measure sets and data collection tools are credible and broadly used, and proposals for distributing payment have been developed—M+C plans and inpatient rehabilitation facilities; (2) settings that impact a large number of beneficiaries—hospitals and physicians—using more limited data sets; and (3) across settings where providers could work together to better coordinate care. The section ends with guidance for CMS on issues to consider in developing demonstrations, and for policymakers to consider if implementing these types of incentives more broadly.

Current Medicare quality efforts

CMS is building and using the tools necessary to implement incentives. It uses two nonfinancial incentives to improve quality—flexible oversight[5] and public disclosure. By collecting and analyzing data and providing feedback to providers, it identifies appropriate measures and data collection systems to use for implementing financial incentives. In addition, CMS uses its demonstration authority to explore various payment structures, such as shared savings and capitation, which could also be used as incentives to improve quality. Beyond its initiatives focused directly on quality improvement, CMS has a variety of tools it can use with either financial or nonfinancial incentives (see text box, p. 114).

As noted previously, a critical part of the CMS strategy for improving care is disclosing quality information publicly on M+C plans, nursing homes, dialysis facilities, and home health agencies. Public disclosure provides information to help consumers choose providers and plans, and encourages providers and plans to improve care for beneficiaries. The measures used to compare these organizations are, for the most part, broadly understood and accepted. For M+C plans, the measures often overlap with private accreditation and other purchaser requirements. For nursing homes and home health agencies, the information used to develop the measures is already collected for payment and care management purposes. Industry acceptance is widespread for the dialysis measures.

The results from these efforts are encouraging. Scores on the measures for M+C plans and dialysis facilities have continued to improve. While the improvement is not solely a function of CMS's public release strategy, there is little question of the importance of the Medicare initiative in focusing provider attention on improving care on these measures. The nursing home initiative is new, but CMS believes that the disclosure will improve quality. Since the public release of nursing home information began, the QIOs—the organizations under contract with CMS to help providers improve care—have seen nursing home requests for technical assistance increase dramatically. The public release of home health agency scores in April 2003 is too recent to characterize the results.

5 CMS is implementing one form of flexible oversight in the M+C program by allowing plans that have reached a certain level of performance on a required quality measure to opt out of the national priority project on that topic for one year. This year, several plans will not have to improve because they already have high mammography screening rates.

Tools Medicare uses to improve quality

In addition to purchasing health care, Medicare also regulates, makes coverage decisions, and sponsors research. The Institute of Medicine found that Medicare can direct resources towards quality improvement in each of its roles (IOM 2002b).

In our January 2002 report on quality, MedPAC described the program's current regulatory activities and made recommendations for improving quality of care through quality improvement standards. Establishing standards creates clear expectations; yet, standards tend to rely on external motivation and negative incentives. Incentives for quality complement regulations by rewarding innovation and improvement that flow up from providers themselves rather than down from the administration of the program.

Medicare could consider using coverage policy to improve quality, or eliminate payment for services that contribute more to costs without improving quality. For example, some have suggested that Medicare find ways to limit payment in hospitals for costs which result from a preventable medical error. Alternatively, Medicare could improve the quality of management across settings of care by establishing payment for a bundle of services.

As a significant sponsor of research, Medicare has already taken steps toward improving quality. Medicare has sponsored the development of performance measures for several types of providers and implemented several demonstration projects to test quality incentives. However, researchers at Harvard University (Fernandopulle 2003) find that additional research is needed to develop more robust performance measures to explore the role of patients in directing their own choices. For example, Medicare could test the costs and benefits of a measure set with many, less robust measures against one with a few very powerful ones. ■

Public release of information comparing hospitals and individual physicians on the basis of quality is more difficult.[6] While progress has been made on hospital measurement, hospitals do not yet routinely collect information on a uniform set of measures. Hospitals serve so many different types of patients, it has been difficult for CMS or the JCAHO to agree upon a set of measures that reflect a broad enough spectrum of hospital services to make comparisons. However, as of June 2002, JCAHO requires those hospitals it accredits (representing 95 percent of all hospital beds) to report performance on measures which are also used by CMS in the QIO program.[7] In addition, CMS has worked with the National Quality Forum (NQF) to identify a set of hospital measures that many stakeholders could endorse. The NQF, whose members include hospitals, JCAHO, CMS, private sector purchasers, and consumers, has endorsed a set of hospital measures.

CMS is also working with a coalition of private sector organizations on a voluntary disclosure initiative. Relying on 10 measures used by the QIO program and the JCAHO, CMS and its private sector partners hope to learn more about whether publicly disclosing information can successfully support hospitals' improvement efforts.[8] Another primary challenge for CMS is deciding how to collect the information for measures without creating an undue burden on themselves or the hospitals.

For individual physician offices, the difficulty for CMS and other private plans has been identifying measures that reflect enough cases for valid comparisons. For example, while provision of certain screening services for diabetes can be measured, some physicians will not see enough diabetics for their scores to be relevant. Further, because diabetics make up differing shares of physicians' practices, other quality measures may be more indicative of the performance of physicians who see few diabetics. These statistical issues are not impossible to address, but they do complicate efforts to publicly disclose information or implement financial incentives. They also mean that data collection may need to be more expansive to reflect a wide variety of patients and to ensure sufficient sample size for validity.

CMS is working to define quality measures to assess clinician performance in providing ambulatory care for beneficiaries with chronic diseases through a three-year initiative called the Doctors Office Quality (DOQ) project. CMS collaborates with a variety of private sector organizations and contracts with three QIOs to pilot measures and develop and evaluate strategies for improvement. The American Medical Association-coordinated Physician Consortium for

6 Since the release of hospital mortality data, CMS has not publicly released information on hospitals, but several private sector health plans have publicly provided information on individual hospitals and also varied payment levels for hospitals based on quality measures.

7 Hospitals have a choice of conditions upon which to collect data for JCAHO accreditation. Therefore, while this set of measures is a standard set, all hospitals do not collect comparable data.

8 The groups involved in the initiative include: American Hospital Association, Federation of American Hospitals, American Association of Medical Colleges, National Association of Children's Hospitals and Related Institutions, the AFL–CIO, Agency for Healthcare Research and Quality, AARP, NCQA, and JCAHO.

Performance Improvement and NCQA assist the project by providing CMS with evidence-based performance measures and reporting tools. The agency looks at measures in three areas: (1) clinical quality; (2) systems of care, for example, a measure of the system for follow-up of abnormal laboratory results; and (3) patient experience of care.

Currently, CMS uses provider feedback as opposed to public release of measures as the primary tool for improving quality of hospital and physician services in part because of the limitations on available measures for these settings. Through the QIO program, CMS collects state-level data on physicians and hospitals on inpatient and outpatient measures. Each state has a QIO accountable for statewide improvement on the hospital and physician measures. Hospitals and physicians are not required to work with the QIOs, but many do. This program has led to improvements in care in the inpatient and outpatient settings (Table 7-1, p. 116) and the identification of measures that could be used in the future to apply financial incentives.

CMS is also working on several demonstration projects to test various payment methods that might encourage providers to improve quality. However, current activities do not focus on the incentives we find most prevalent in the private sector—financial differentials for providers and varied enrollee cost sharing. The demonstrations focus primarily on shared savings, capitation, and a wide variety of other tools to improve care for certain types of diseases.

In one demonstration, CMS is evaluating the prospect of shared savings by focusing on improving care for beneficiaries with chronic conditions. The demonstration allows physician group practices to share in some of the savings they may generate through better care management. An expected amount of spending is calculated per beneficiary, and if savings materialize, the Medicare program will share them with the group practice. Portions of the savings that go to the group practice are based on achieving quality goals. CMS is also seeking proposals for a disease management demonstration that uses capitated payment and a variety of other types of disease management models. By focusing on group practices, CMS avoids some of the statistical problems of measuring the quality of care at the individual physician level.

Should Medicare implement financial incentives?

CMS efforts to publicly disclose information on quality and provide feedback to providers are essential for improving quality and building the infrastructure necessary to distinguish providers on the basis of quality. The Commission strongly supports this work and believes it should be expanded.

Further, as the nation's single largest purchaser of care, Medicare must lead efforts to improve quality through the use of financial incentives. Medicare's beneficiaries and the nation's taxpayers can no longer afford for Medicare payment to remain neutral towards quality. Medicare's efforts are urgently needed because results from private sector efforts alone may take a much longer time to show the effect.

RECOMMENDATION

The Secretary should conduct demonstrations to evaluate provider payment differentials and structures that reward and improve quality.

IMPLICATIONS

Spending

- CMS does not have the authority to design a demonstration that is not budget neutral; therefore, this recommendation would not increase spending.

Beneficiary and provider

- The beneficiaries in the demonstration—and if implemented more broadly, other beneficiaries—should see improvements in care.
- Depending on how incentives are designed, some providers could receive higher payments or lower payments. In addition, providers or plans may need to shift resources to data collection and improvement efforts.

Although the Commission is limiting its recommendation to demonstrations, CMS or the Congress may wish to use the criteria outlined in this chapter to develop strategies for paying differentials for quality in specific settings without going through demonstrations. Given the wide number of approaches to implementing payment differentials identified in our discussions with purchasers, strategies other than those discussed in this chapter could be simple to implement and improve care for beneficiaries. For example, if broad measure sets are yet to be developed in some settings, payment incentives could be linked with measures already found to be credible. Payment incentives could also be based on provider participation in measurement and improvement initiatives rather than specific measurement goals.

Of the incentives for improving quality we have examined, the Commission believes that the most promising one that Medicare is not currently using is payment differentials for providers.[9] Defining the measures, collecting the data, and designing a system to distribute the dollars is a complex undertaking. However, CMS could build on and participate in the numerous private sector efforts in designing their demonstrations.

While legislation would be required to fully implement this type of incentive, the precedent exists to adjust Medicare payment for specific policy objectives, such as promoting access or teaching.

9 The CMS administrator has recently discussed publicly a planned demonstration where hospitals would be paid based on quality performance. Quality of care for certain conditions, such as heart care, would be measured, and depending on the hospital's performance, diagnosis related group payments for that condition might increase.

TABLE 7-1

National summary of Medicare quality indicators

	Median state rate 1998–1999	Median state rate 2000–2001	Weighted average 2000–2001	Median improvement	Median relative improvement
Inpatient setting					
Acute myocardial infarction					
Aspirin in 24 hours	84	85	84	3	15
Aspirin at discharge	85	86	84	2	14
Beta blockers in 24 hours	64	69	68	6	17
Beta blockers at discharge	72	79	78	7	28
ACEI in AMI	71	74	71	4	10
Smoking cessation	40	43	38	3	5
Congestive heart failure					
Evaluation of LVEF	65	70	71	5	14
ACEI in HF	69	68	66	–4	–10
Stroke					
Afibrillation	55	57	57	3	7
Antithrombotic	83	84	83	2	12
Nifedipine	95	99	99	4	77
Pneumonia					
Antibiotic in 8 hours	85	87	85	2	10
Antibiotic Rx	79	85	84	7	32
Blood culture	82	82	81	–2	–9
Influenza screening	14	27	24	9	10
Pneumonia screening	11	24	23	11	12
Any setting					
Adult immunization					
Influenza immunization	67	72	71	5	16
Pneumonia immunization	55	65	64	10	22
Breast cancer					
Mammography	55	60	77	5	11
Diabetes					
HbA1c	70	78	70	8	29
Eye exam	68	70	74	1	4
Lipid profile	60	74	76	16	38

Note: ACEI in HF (angiotensin-converting enzyme inhibitor in heart failure), AMI (acute myocardial infarction), HbA1c (hemoglobin A1c), LVEF (left ventricular ejection fraction). The rate is the percentage of beneficiaries receiving clinically indicated services. These data are representative samples of the median state for each indicator for both time periods. The weighted average is based on the number of beneficiaries in each state. Median improvement refers to the median absolute improvement across all states. Relative improvement is the absolute improvement divided by the difference between the baseline performance and perfect performance (100 percent). Relative improvement is sometimes referred to as the reduction in the failure rate.

Source: CMS data from the quality improvement organization program (Jenks et al. 2003).

Hospitals that serve a disproportionate share of uncompensated care patients and those that provide medical education receive an adjustment for those factors. In addition, the Secretary is authorized to use a direct payment equal to 10 percent of the reimbursement for a physician service to those who provide services in a health humanpower shortage area. In this case, the objective would be to encourage the provision of high-quality care.

It may be possible to implement cost differentials for beneficiaries, the other type of incentive prevalent in the private sector, in the future. However, the Commission finds that it is not the best tool to explore at this time. Requiring beneficiaries to pay more or less for care depending on the quality of the provider or plan is a more fundamental shift in policy than implementing payment differentials for providers. In the extreme, if the incentives resulted in too much patient movement, some providers could be overwhelmed by demand and others may lose significant numbers of beneficiaries. And, on the other hand, if beneficiaries did not change providers based on their quality scores, they might experience confusing fluctuations in copay amounts. In either case, beneficiaries could experience far more change in the benefit than they may desire.

One could imagine that Medicare identifying tiers of providers based on quality and varied cost sharing could act as an incentive for providers to improve care. However, because most beneficiaries have some form of supplemental coverage, it is unclear whether these changes would affect beneficiaries' actual use of providers. While Medigap policies could be created to recognize these differences in beneficiary liability, and M+C plans might base networks on these tiers, the financial impact might still be too low to influence beneficiary behavior.

Our analysis shows quality can be improved by building financial rewards for improved care within settings into the payment system. A longer-term but equally important goal is to develop alternative payment structures that encourage individual providers to collaborate with each other to better coordinate and manage a patient's care. While the private sector provides very few examples of experimentation with alternative payment structures, it is evident that it understands the value that organized groups of providers bring to efforts to improve quality. Private sector efforts often focus on organized groups of providers, such as HMOs, group practices, and integrated networks of hospitals and physicians perceived as better able to achieve these broader quality goals than individual providers.

Targeting demonstrations of payment differentials and structures for providers

Paying providers different amounts based on their performance on certain quality measures is a powerful tool that should be used carefully. Small fluctuations in Medicare payments can have a large impact on providers. Lessons learned from the private sector efforts may help ensure smooth implementation of incentives in Medicare. In this section, we outline implementation issues, and provide guidance on how demonstrations could be targeted in various settings and to encourage better coordination across settings.

Implementation issues

Medicare's primary advantage over the private sector in broadly implementing financial incentives—its size—is also its primary disadvantage. All types of incentives, including financial ones, have weaknesses that are magnified when a purchaser as large as Medicare uses them to improve quality. Multiple barriers to implementing incentives in the Medicare program exist:

- Administering a program to define measures and collect and evaluate data on quality is complex and difficult.
- Other important dimensions of quality might be ignored if all providers focus on only Medicare measures. Further, the need to engage in broad public discussions before identifying specific measures and moving to new ones may slow necessary innovation.
- The limitations of current case-mix adjustment methods may result in providers scoring low because they take sicker or more complex patients, not because they provide low-quality care.
- A broad spectrum of providers participate in Medicare with varying abilities to commit resources to collect and analyze data, and implement strategies to improve care. This diversity makes it difficult to implement incentives across the board.

The criteria for choosing measures which emerge from our private sector analysis address several of these concerns. However, it will be challenging to find measures in every setting that meet all of the criteria. Well-accepted and valid measures may not exist for some important goals. In the private sector, sometimes the simplest method for choosing measures is to use what is available for a specific setting to, as our interviewees described it, "get the conversation going."

Criteria for choosing effective measures include:

- Measures must be evidence based, and broadly understood and accepted.
- Most providers and plans must be able to improve upon the measures; otherwise, care may be improved for only a few beneficiaries.
- Chosen measures should not discourage providers from taking riskier or more complex patients.
- Information to measure the quality of a plan or provider must be reasonably obtained and not pose an excessive burden on any of the parties involved.

After determining which measures to use, the method for distributing payment could also be designed to lessen the potential for unintended consequences. For example, to reach the goal of ensuring that as many Medicare providers as possible improve care, the target goal could be a high level

of improvement. Every provider can improve care. The disadvantage of this approach is that it could reward some providers who may achieve significant improvement, but are still at a relatively low level of quality. Establishing a target goal, if set at a relatively low level, could also encourage all providers to improve. However, if goals are set too high, providers at the low end might be discouraged from trying to improve. A mixed strategy, basing a percentage of the reward on improvement *towards* a specific goal and the other portion of the reward on *attainment* of the target level, might be an effective way to encourage a broad spectrum of providers to improve.

One of the more common mechanisms for distributing payment in the private sector is to identify a certain percentage of high-ranking providers or plans and then reward them. A drawback of rankings is that they guarantee that some providers will be considered poor performers. If the spread between the top and the bottom performers is small, this method creates inequities between providers with very similar scores.

The other variable in determining payment distribution that could address some of the above concerns and help determine whether improvement occurs is the strength of the reward. One could imagine that financial incentives could be greater or lesser depending on the difficulty or impact of the goal. Well-established dollar figures that encourage improvement do not exist, in part because each incentive program is distinct. Purchasers have different market shares in different regions, provider market strategies vary, and incentive programs rely on different types of payment differentials and measures.

However, we do know that even zero direct financial incentive—public disclosure—does result in some improvement. We also know that Medicare's market share is large enough that even small incentives could impact providers. In the recently launched Bridges to Excellence initiative, physicians told employers that $1,000 was enough to engage them. It may not require a large amount of payment from the Medicare program.

The ability to apply incentives in various settings

CMS should broadly target efforts to link payment with quality in the settings where efforts are more well developed and narrowly target efforts in settings used by a broader number of beneficiaries, such as hospitals and physicians. While it will be difficult to meet all the criteria for choosing effective measures, quality measurement and data collection efforts are more mature in some settings than others. A robust set of well-accepted measures and a standardized method of data collection already exist in two settings—M+C plans and inpatient rehabilitation facilities. These settings routinely collect data on the measures as a part of their participation in Medicare or as a part of care management. While these settings of care do not represent the most commonly used settings for beneficiaries, they do provide CMS with the opportunity to use demonstrations to evaluate the impact of incentives in settings that serve a diverse group of beneficiaries and use divergent payment methods (capitation and prospective payment).

Sets of measures and data collection systems are not as well developed for the most commonly used settings of care, hospitals and physician offices, but CMS should focus demonstrations there because of their importance to beneficiaries. It might be possible, for example, to design demonstrations of payment differentials based on measures in the voluntary hospital initiative, those used for JCAHO accreditation and QIO use, or the NQF endorsed set. For physicians, performance on certain domains of care where measures of quality do exist, such as heart disease or diabetes, could be the basis for incentives. In addition, demonstrations in these settings and others, such as skilled nursing facilities, home health agencies, and dialysis facilities might be useful in further developing broader measure sets.

Medicare+Choice plans

Medicare+Choice plans may be prime candidates for applying incentives because they meet, in whole or part, all of the criteria for successful implementation. Standardized, credible performance measures do not exist for many Medicare providers, but are collected on all M+C plans. Each year M+C plans collect audited Health Plan Employer Data and Information Set (HEDIS) data on process measures, such as whether patients received certain preventive screenings, and some outcomes measures, such as hemoglobin levels for diabetics and cholesterol control after an acute cardiovascular event. In addition, plans report on the Consumer Assessment of Health Plans Survey (CAHPS) data that reflect health plan members' assessments of the care they receive, their personal doctor and specialists, the plan's customer service, and whether they get the care they need in a timely fashion. While these measures have been in place for a few years and some suggest they need to evolve to new measures, they still represent a broad cross section of plan quality. Most of the measures do not require risk adjustment and, while some suggest these measures are better applied at the provider level, plans have developed a variety of strategies to improve upon their scores by working with providers in their networks.

Targeting incentives at the health plan level serves a dual purpose. First, the health plan can use whatever leverage and data analysis capability it has to encourage improvement in the individual settings with which it contracts. Second, health plans can also address the problem of the lack of coordination and appropriate management of chronic conditions across settings and with patients. Measuring care at the health plan level may make it possible to identify effective mechanisms for better coordination not possible through provider-specific efforts. While care has been improving on these measures, more is possible. To reward high performing plans and further encourage improvement, one group of

M+C plans has proposed a mechanism for using payment incentives to improve quality (see text box at right).

Inpatient rehabilitation facilities Inpatient rehabilitation facilities are another setting where financial incentives might be implemented. Standardized, credible performance measures are also routinely collected there. The functional independence measures, part of the Inpatient Rehabilitation Facility–Patient Assessment Instrument (IRF–PAI), are not only used for Medicare payment purposes, but as an integral part of delivering care. The measures give the provider information on the functional abilities of patients when they enter the facility, and over time, to help manage a patient's care. A risk-adjustment mechanism is built into the prospective payment system (PPS) case-mix adjuster which uses the IRF–PAI to assign patients to payment groups (see text box at right).

Hospitals Incentives in the private sector focus mostly on hospitals and physician offices. Improvement is critical because most care is delivered in these settings. As discussed, CMS is already working through the QIO program, several demonstration projects, and voluntary public disclosure of hospital information to improve quality. However, implementing financial incentives would further encourage improvement.

Several sets of measures exist. CMS could base payment differentials on:

- 10 clinical measures used in CMS's voluntary public disclosure initiative,
- measures jointly agreed upon for use by JCAHO and the QIOs,
- measures endorsed by the NQF,
- structural standards such as CPOE and ICU staffing developed by Leapfrog Group (formed by private and public health care purchasers to promote quality), or
- a combination of these sets of measures.

Each of these measure sets presents CMS with issues ranging from appropriate case-mix adjustment to the ability for all hospitals to meet them. In addition to the problems specific to each measure is the question of whether, as a whole, any of these sets capture the broad spectrum of services hospitals provide. The first three sets overlap significantly.

The 10 clinical measures of care for heart attacks, heart failure, and pneumonia CMS uses in its voluntary public disclosure initiative are well accepted and useful for measuring quality in different size hospitals. In addition, the majority of hospitals already collect data on the measures for either JCAHO accreditation or the QIO program. To the extent a hospital does not already collect the data, the QIO in each state could provide assistance.

JCAHO requires hospitals to collect data on well-accepted measures for accreditation purposes. These measures are also used by the QIOs for their work with hospitals and encompass the 10

Two proposals for financial incentives

Medicare+Choice Plans

The Alliance of Community Health Plans, in conjunction with the Group Health Cooperative in Seattle, has developed a proposal for applying financial incentives in the Medicare+Choice (M+C) program that builds on current payment methods and does not exclude plans from the program. They propose that a fund equal to roughly 1.5 percent of health plan spending (approximately $500 million) be set aside to reward superior performance. To avoid the need to establish a set standard or reward only improvement, plans would be evaluated on their Health Plan and Employer Data and Information Set and Consumer Assessment of Health Plans Survey scores, and then ranked using the National Committee for Quality Assurance (NCQA) methodology. Using a method that parallels one used by NCQA for its accreditation program, Medicare would identify the top 25 percent of plans nationally.

Seventy-five percent of the incentive payment pool would then be distributed to those plans, each receiving an equal amount per capita. To ensure that the rewards would be available in all regions with M+C plans, Medicare would grant the remaining 25 percent of the incentive payment pool to plans in states with two or more plans. However, no plan would be allowed to receive both a national and state award, nor could a plan receive an award if its performance overall did not reach the 60th percentile nationally.

Inpatient rehabilitation facilities Concerned that current payment methods may be encouraging inpatient rehabilitation facilities to shorten lengths of stay (LOS), the American Medical Rehabilitation Providers Association developed a proposal to counter the current payment incentives for shorter LOSs. The proposal would provide payment for extra days (beyond the average LOS) for patients who continue to experience increases in functional scores above an average expected improvement. This approach would reward providers delivering higher-quality care and counter the incentive for continual lessening of lengths of stay. One concern is whether these incentives could discourage rehabilitation facilities from taking certain patients, like those with cognitive impairments. ■

voluntary disclosure measures. However, because JCAHO only requires accredited hospitals to collect data on two of four priority areas, hospitals are not collecting uniform information. Hospitals not accredited by JCAHO may not be collecting data on any of the measures.

The NQF measures also encompass many of the JCAHO/QIO measures, but include additional measures considered important by NQF members. Because this membership broadly represents those with a stake in hospital quality, many have suggested that CMS should use the NQF-endorsed set as a basis for public reporting and payment differentials. Others caution that the number of measures would place too great a burden on hospitals, and data collection methods are not reliable for some measures.

The structural improvements called for by the Leapfrog Group are important for improving the safety and quality of hospital care. However, hospitals have expressed concerns that implementing computerized physician order entry, while useful, is difficult for some hospitals.

CMS would need to consider all of these sets and the issues they present in order to choose measures to link with payment incentives. However, lack of measures and tools for data collection in hospitals should not be considered barriers to moving forward with strategies to link quality with payment incentives.

Physicians Credible measures of physician quality useful at the physician office level are also available, but on a limited number of conditions. For example, the American Diabetes Association, CMS, NCQA, the Physician Consortium for Performance Improvement, and various private sector purchasers use or develop measures for diabetes and for appropriate management of patients with heart conditions. In addition to its diabetes care recognition program, NCQA expects to begin to offer a heart care recognition program to physicians in July 2003.

Two concerns remain: whether certain types of measures are useful for every physician, and whether the combination of measures currently available represent the whole of the quality of care in a physician office. While measures on specific conditions may not represent the whole of the physician's quality, recent research at NCQA has concluded that care patterns for a fairly small number of patients with diabetes—35—could be enough to characterize the physician's quality of care for that condition.

The private sector addresses these same issues with physician measures by:

- relying on broad matrices of measures. To avoid steering enrollees to individual physicians based on only a few measures, some purchasers and plans have developed as broad a set of measures as possible.
- rewarding physicians for the quality of care for conditions where measures are available separately. This is the approach of the recently announced private sector initiative involving several large employers called Bridges to Excellence. Rewards are available in three separate domains—diabetes and heart care, and system improvements—based on an independently developed certification program in each. Each physician can decide to improve in all, one, or none of the domains.
- developing measures that could apply to any physician office setting—regardless of size of the practice—such as patient satisfaction or physician investment in certain systems to better manage patient care.
- measuring care at the group practice or network level. Paying for care at the group practice level is not currently available in Medicare; however, CMS is measuring quality at the group practice level in several demonstrations. Because systems of care are more effective managers of patient care, the Commission encourages CMS to expand their efforts to identify mechanisms for encouraging individual physicians to align with groups of physicians to better manage care.

The agency's DOQ project will go a long way toward identifying measures of quality for individual physician offices. While the agency does not intend to use this pilot project to compare individual physician offices, CMS could use the pilot to learn more about which measures are useful for comparisons in the future. The agency could also reward physicians for participating in the pilot.

Another challenge for CMS when measuring physician quality of care is how or whether to measure the quality of care delivered by specialists.

Skilled nursing facilities CMS's public disclosure of quality measures derived from the Minimum Data Set (MDS) on nursing homes is the primary incentive currently in use to improve care for skilled nursing services. In its recent public disclosure initiative, the agency only used four measures to report on the quality of care in skilled nursing beds. While it is useful for skilled nursing facilities (SNFs) to focus on these few measures, and for nursing homes to focus improvement efforts on all of them, they do not necessarily provide a broad picture of the quality of care for SNF patients. Also, the MDS was designed for longer-stay patients with needs primarily for maintenance of care, as opposed to functional improvements. Additional measures focused on short-stay patients may need to be developed, such as readmissions for certain conditions or measures of functional improvement over time. Risk-adjustment methods may also need to be improved for current SNF measures.

The utility of new measures would need to be balanced with the burden of collecting data separately from the MDS. The advantage of deriving measures for quality incentives from the MDS is the

minimization of the data collection burden. SNFs also use the MDS for care management and payment purposes.

Home health agencies CMS currently uses the quality information derived from the OASIS on home health agencies to pilot public disclosure of information. These data represent a broader portion of what home health agencies do than the MDS does for SNFs, and are generally well accepted by providers as reasonable measures of quality. Providers are concerned about appropriate risk adjustment and adequacy of specific measures. However, on the whole, OASIS is well regarded. Home health agencies may be appropriate candidates for financial incentives. However, it might be wise to observe the impact of public disclosure of quality information before moving to financial incentives. While some home health providers consider collecting information for OASIS burdensome, it is mandated by law and currently used for multiple purposes.

Dialysis facilities Dialysis facilities have publicly reported on a core set of measures for several years, including information on the facility's performance on the adequacy of hemodialysis, anemia, and mortality. These are well-accepted measures that represent a broad spectrum of care in the dialysis facility, used both by CMS for accountability and by the facility to improve care. Much improvement has already occurred on the publicly disclosed measures: Therefore, it is not clear whether payment differentials based on these measures would encourage additional improvement.[10]

However, CMS could expand its individual facility-level reporting measures to include vascular access and base an incentives program—either nonfinancial or financial—on the broadened measure set. Although national progress on vascular access is reported publicly, CMS does not currently include individual dialysis facility scores on its website. As noted in Chapter 6 in this report, vascular access is the second leading cause of hospitalization for these patients (USRDS 2002) and care for this condition accounts for about 10 percent of Medicare spending for hemodialysis patients. Further, CMS data show that significant opportunities exist to improve this type of care. Many patients do not receive the type of care recommended by the National Kidney Foundation. It may be important, however, to consider the role that clinicians play in improving this type of care. Nephrologists, vascular surgeons, radiologists, and dialysis facilities together make decisions about beneficiaries' vascular access care.

The ability to apply incentives across settings

In the short term, applying payment differentials to improve care within settings is critical. However, in the long run, to meet the health needs of current and future Medicare beneficiaries, Medicare must lead efforts to develop incentives for better management of care across settings. While it is possible to address this issue to some extent through incentives for individual settings, exploring structural payment system changes that encourage providers to work together to meet beneficiary needs is more direct.

Addressing care coordination within the fee-for-service context The goal for this type of an incentive program is to encourage better care for specific types of beneficiaries for whom care across settings is essential. The incentives might still be applied at the setting level to create expectations for how each setting should contribute to improving that care. Examples of this type of approach include focusing on:

- **Serious chronic illness.** One population in need of targeted quality improvement efforts are those beneficiaries with serious chronic illness (Berenson and Horvath 2003, IOM 2002a). This population often has multiple conditions requiring care from numerous settings. While one or another of their conditions might be under control at any one time, they will usually not return to full health and will eventually require coordination of care at the end of their lives as well.

  Care for such beneficiaries is a large and growing segment of Medicare costs. The need for intense management of care across settings and with patients and their families is high, yet Medicare payment and coverage policies were not designed to address these needs. Incentives for physicians to better coordinate with home health agencies or skilled nursing facilities with other specialists could counterbalance the lack of other incentives for appropriate care management. One of our interviewees suggested creating a continuity index using claims data to determine whether physicians of beneficiaries with serious chronic illness follow their patients across episodes and settings of care.

- **Improving care for specific conditions.** Well-accepted and frequently used measures exist for such important conditions as heart disease and diabetes. Measures could be applied to the Medicare population generally and M+C plans, hospitals, physicians, and possibly other settings. Efforts in these areas would build on a wide variety of private sector efforts and reinforce the work of the QIOs, both of which heavily rely on diabetes and heart measures. Creating the expectation that all providers should improve care of a certain condition makes it more likely that they will coordinate with each other.

- **Certain services that occur in more than one setting, such as pain management.** Pain management represents a type of service that occurs in a variety of settings and is considered a service in need of

10 Much of the improvement was gained over a period when the only rates CMS disclosed were national scores. Individual setting-specific reporting began in 2001.

improvement. Incentives could be based on measures of appropriate pain management, including whether a provider has a program for assessing and adjusting pain medication levels, processes for patients to evaluate their own pain levels, and tools for gathering information on whether patients believe their pain is managed appropriately.

Addressing care coordination through structural payment changes

One of the barriers to the provision of high-quality care is the fragmentation embedded in a fee-for-service payment system. Needs for care do not begin and end at an individual provider's door, but the predominant mechanism for payment in the Medicare program does. Medicare beneficiaries need multiple providers to communicate fully across and within settings and ensure that the beneficiary and his or her family understand their roles in managing the patient's condition. These services are not currently recognized in the Medicare payment system, except perhaps in the M+C program.

CMS is currently designing several demonstrations that examine different payment structures. These and future ones should focus specifically on how these mechanisms work to improve coordination across settings and outcomes of care. While several current demonstrations use these types of payment mechanisms, they are not explicitly designed to test the impact of these payment mechanisms on quality. Examples include:

- **Risk sharing.** By recognizing the role of multiple providers, these payment mechanisms provide incentives for better overall management of care across settings and time. These payments can apply to management for specific conditions or for bundles of services. These are called risk sharing because CMS shares the risk of the cost of care with the entity it pays. CMS defines a set of services for which a provider entity is responsible, calculates expected costs for those services, and pays the entity the expected cost for that care. If the entity can provide the care for a lower cost, it can keep the difference. If the costs are greater than the payment, the entity receives no additional money.

  Risk sharing, coupled with paying for a bundle of services that spans several providers within a setting or several providers across settings, creates incentives for providers to increase their collaboration to lower the cost of care. For example, the agency could make a single payment for an inpatient procedure instead of paying the hospital and the physician group separately. The Centers of Excellence demonstration that provided a single, predetermined payment to an entity made up of hospitals and physicians for certain types of care delivered in the inpatient setting is an example of risk sharing and bundling.

  Another example of bundling is paying a group of providers for a set of services for a condition that requires care in multiple settings. Making a single payment for care in multiple settings creates an incentive for health professionals in those settings to work together to provide care as efficiently as possible. This is also one way of sharing the savings of quality improvements referenced earlier in the chapter. If better physician care saves the broader entity dollars because its patients need fewer hospitalizations, care improves and the physician sees some of those savings.

- **Paying for care or disease management.** Medicare could pay a single amount for a service termed care or disease management. Disease management focuses on a specific disease, whereas care management could be more broadly applied, perhaps to the coordination of care for someone with very serious illness of any type, or for beneficiaries who are particularly frail. The method most commonly used in the private sector is for the purchaser or payer to pay a fee for these services to be provided to a defined population. We would expect these techniques to improve coordination by specifically creating a payment stream for such services. Disease management could also be paid on a risk-sharing basis. In this case, the bundle of services would be defined as all those needed to treat a patient's condition. In part, because of the difficulty of defining that bundle, few examples have surfaced of disease management paid on a risk basis.

- **Creating artificial groups of providers.** Medicare could define service delivery systems with claims data to map patterns of care in specific regions and create an incentives program based on the quality of care delivered by those providers. Accountability for the quality of care would be measured at the overall group level, but payment incentives could still be paid to individual providers who were a part of the system. While the providers would not need to create a formal affiliation relationship, it would be to their benefit to coordinate with other providers in the delivery system to obtain financial or other types of rewards.

Examples of private sector efforts to use incentives to improve quality

Previous sections in this chapter summarized findings from our research on private sector efforts. In this section, we provide more in-depth discussion of each type of incentive, including examples of specific initiatives, to illustrate the wide spectrum of measures and payment distribution mechanisms the Medicare program could use when implementing incentives.

Public disclosure

While two of the primary objectives of public disclosure of quality information are enhanced consumer choice and public accountability of the provider, such disclosure often motivates providers to improve care. Disclosure is widely used in the private sector, often in tandem with other strategies. It is a precursor to, and an essential part of, providing employees or enrollees financial incentives to use high-quality providers. It takes many forms, from magazines devoted to physician and hospital ratings, to state reports on providers, to facility-specific information on purchaser or plan websites. The private sector, Medicare, many states, and public employers use this strategy.

PacifiCare In California, PacifiCare has designed products that use all types of incentives. However, this managed care company began by disclosing information to their HMO enrollees on the quality performance of groups of physicians. Both current and new members opted for the higher-quality providers. The company released the information at the time of open enrollment and has found that 30,000 enrollees chose the higher quality-physician groups. Although this represented only 3 percent of their enrolled population, PacifiCare believes this to be a significant movement. This shift of enrollees resulted in $18 million in additional capitated payments for the higher-quality physician groups. In addition, of the 41 measures reported, 22 have shown improved mean performance and reduced variation across all provider groups.

Central Florida Health Care Coalition Representing 120 employers with over 1 million covered lives in the Orlando region, the Central Florida Health Care Coalition has the data systems and calculations to pay physicians based on their adherence to a set of best clinical practices and their patients' outcomes. The data systems abstract clinical records and claims data to compare patient outcomes to severity-adjusted expected outcomes, based on national standard benchmarks. These quality benchmarks will be used to assign each physician a rank according to the appropriateness, effectiveness, and cost efficiency of treatments they provide. Once ranked, the physicians will be sorted into one of three levels and paid on one of three different fee schedules; those scoring higher receive higher fees. Even when physicians had not yet been assigned tiers, simply releasing the quality scores of coalition physicians practicing in hospitals is generating some financial bonus for them: Some specialists have seen increased referrals and many have negotiated lower malpractice premiums based on good scores.

New York coronary artery bypass graft (CABG) mortality A well-known public incentive program is the New York State Health Department's release of risk-adjusted mortality rates after CABG surgery for hospitals and physicians. Studies of the results of this release revealed that while consumers largely did not use it to choose providers, hospitals and physicians responded to the data by finding ways to improve their cardiac surgery programs. Deaths from cardiac surgery fell 41 percent in the first four years of the release.[11]

Payment differentials for providers

Monetary bonuses for providers meeting quality targets are widespread and range from specific dollar amounts to basing a percentage of payment on quality achievement. Health plans, large purchasers, and members of several coalitions of private-sector purchasers offer them to encourage hospitals, physicians, or other providers to improve the quality of care for their patients. Interestingly, several plans and purchasers have stated that providers are requesting significant payment increases. Through the negotiation process, purchasers and plans say they are unwilling to increase payments without some accountability for the value of the product. Our interviewees stated that this strategy is successful in prompting providers to tie a portion of their payment increase to performance on quality measures. This willingness to bargain over quality performance varied by market, depending on whether the plan or purchaser had enough market share to command the attention of the provider community.

Integrated Healthcare Association To foster quality improvement at the physician group level, purchasers and plans in California have banded together to create common financial incentives for physician groups. These incentives are tied to a standardized set of quality measures. Because all the payers request the same information from providers, these efforts also have the potential to lessen provider burden. Six large health plans—Aetna, Blue Cross of California, Blue Shield of California, PacifiCare, CIGNA, and Health Net—worked collaboratively through the Integrated Healthcare Association with medical group representatives, the National Committee for Quality Assurance, and the Pacific Business Group on Health, which represents 45 large employers, to develop a common set of measures for group practices. These measures will be used to reward providers for high performance or lower costs for enrollees who go to the higher-quality providers. Plans and purchases in Massachusetts and several Midwestern states have formed the same type of coalition.

Buyer's Health Care Action Group (BHCAG) A coalition of large employers in Minneapolis/St. Paul has encouraged the care systems in its network to meet or exceed minimum levels of patient

11 One recent analysis (Dranove et al. 2002) suggests that while mortality for CABG surgery decreased, mortality for all acute myocardial infarction patients increased, in part because of the public release. The authors contend that in addition to improving care for CABG patients, providers found ways to avoid riskier patients and perform more procedures on patients who would otherwise have been treated without surgery. In response to this claim, other health researchers (Chassin 2002) suggest that the methodology of the study that was critical of the CABG mortality release was based on a flawed risk measurement tool.

satisfaction and delivery of preventive services. It also asked them to identify the focus for quality improvement efforts and to develop a strategy to improve that care. A committee within BHCAG evaluates the improvement effort and can award a system with a gold ($100,000) or silver ($50,000) award for its accomplishment. Early results have been positive; for example, one care system proudly informed its patients of its award for "keeping over 85 percent of its patients up to date on 10 key preventive health care services essential to maintaining good health. [The system] employed a number of strategies to reach this high level of compliance including identifying preventive care champions at each clinic, establishing a special mammogram appointment phone line, and creating a computerized registry to keep track of patients' immunization histories" (Infoscan 2003).

Employers' Coalition on Health (ECOH) Diabetes is the focus of quality incentives at the Employers' Coalition on Health in Rockford, Illinois. The coalition has chosen diabetes for its cost and because goals for improving care can be adequately defined and measured. ECOH challenged each of its four physician groups to (1) complete a care flow chart for 95 percent of their diabetic patients and (2) maintain hemoglobin A1c levels below 7.5 for a majority of diabetic patients. Physician groups who met both of those goals received a bonus of $28,000. After only one year, ECOH was able to raise the bar for the bonus from 60 to 65 percent of patients meeting target hemoglobin levels.

Empire Blue Cross Blue Shield Empire Blue Cross Blue Shield has formed a group with several of its large employer clients—IBM, PepsiCo, Xerox, and Verizon—to provide bonuses to hospitals that (1) implement computerized physician order entry systems, and (2) staff intensive care units with physicians who have qualifications in critical care medicine.[12] Hospitals that met both goals by 2002 were eligible to receive a 4 percent bonus (based on Empire's total hospital spending for all employees of the participating employers). Hospitals meeting the goals by 2003 and 2004 will receive 3 and 2 percent bonuses, respectively.

In 2002 the number of hospitals that had implemented both improvements increased from 10 to 50, including 8 out of 9 of the major academic medical centers in downstate New York.

Cost differentials for enrollees

Cost differentials for enrollees lower enrollees' costs when choosing preferred health plans or preferred providers. In these initiatives, providers or plans are usually designated as a preferred plan or provider based both on quality and cost efficiency information. These incentives encourage beneficiaries to use higher-quality plans or providers. They also encourage plans or providers to improve their care to attract more enrollees or patients. Our research uncovered fewer examples of these types of incentives in use, but numerous plans and providers are discussing or developing them. One of the longest-running examples is General Motors's system for its salaried employees to choose HMOs.

Employees at General Motors make a lower premium contribution for benchmark HMO plans (plans the company determines to be low cost and high quality). The range in 2002 for the family plan was from $38 to $186 for a benchmark plan or lower-scoring plan, respectively. The criteria for becoming a benchmark plan is based equally on quality and cost effectiveness. The measures for the quality rankings are plan performance on such well-known measures as the HEDIS, CAHPS, the NCQA accreditation status, and a customized request for information used by eight large employer purchasing coalitions.

Employees have migrated to those plans with the highest combined quality and cost scores, saving GM and their employees money and prompting more salaried employees and retirees to enroll in better-performing plans. GM and its employees saved an estimated $5 million in 2001 as a result of employees moving to better-performing plans which generally were lower cost. More important, many plans in the markets where this incentive operated have improved. For example, in southeast Michigan, three HMOs whose prior performance was average or good have attained benchmark status.

PacifiCare, the Central Florida Health Care Coalition, Aetna, and others are planning on or have just implemented cost differentials for enrollees. Each of these organizations has developed a matrix of measures. PacifiCare is offering employers benefit plan options that base cost-sharing requirements, either lower premiums or lower copays, on quality and cost information for physicians. The Central Florida Health Care Coalition will use measures of physician quality to vary copays. Aetna is considering differential copays for use of networks considered higher quality based on quality and efficiency measures.

Other incentives

While the combination of disclosure of quality information with financial incentives is becoming more common in many different settings, these initiatives do not directly address the broader problem of appropriate management of chronic conditions across settings.[13]

12 They chose these two quality improvements from a list developed by the Leapfrog Group, of which these large employers, including Empire Blue Cross Blue Shield, are members. Leapfrog consists of more than 100 Fortune 500 companies and other private and public sector health care purchasers who promote quality through a number of avenues, such as identifying changes with high impact potential, developing standards for judging success at implementing those changes, and disseminating information on providers who meet the standards.

13 Many of these initiatives do use measures that focus on improving care for chronic conditions. However, they target specific settings, as opposed to ensuring better coordination across settings.

While not widely used, the two incentives described below may be better suited to addressing the broader barriers to improving chronic illness care associated with fee-for-service payment (Wagner 2003).

Shared savings Shared savings strategies are designed to align financial incentives among providers to ensure that those who invest in system improvements will share in some of their economic pay-off. By measuring the financial impact one setting's action has on another, these strategies may also remove some of the barriers to coordinating care across settings.

While CMS is evaluating the shared savings payment mechanism through a demonstration project, we found only one example in the private sector of a shared savings initiative and that was at Intermountain Health Care (IHC). Administrators at IHC have tried to create mechanisms to account for these savings and share them with those who implement improvements and those who lose revenue. However, they have found the calculations very complex. In addition, the inability to share savings with Medicare limits the number of conditions for generating net savings.

Intermountain Health Care is an integrated system of care including physicians, hospitals, and a health plan. To provide an incentive for providers to implement protocols to improve quality, the health delivery systems and physician groups negotiated with the health plan to share the resulting savings for their private patients. For example, implementing guidelines for community-acquired pneumonia provided savings through not only fewer hospitalizations, but shorter lengths of stay for admitted patients. The average cost per case went from $2,752 in 1994 to $1,424 in 1995, before and after implementing the guidelines. Savings from this program for private patients were shared three ways: one-third each to payers, physicians, and the health system.

Another example at IHC is improved management of diabetes. IHC, the health delivery system, sees approximately 30,000 diabetic patients, 13,000 of whom are IHC's own health plan members. Through implementing an electronic decision support system for their physicians, IHC decreased hemoglobin levels by 2 points for 5,200 of those patients. This reduction helps patients avoid the risk of life-threatening complications such as amputations, kidney disease, and ischemic heart disease. Several studies have also shown that reducing hemoglobin levels by 2 points saves $2,000 annually per patient in health care costs for the rest of their lives. IHC translates this into a $10 million annual savings for their own plan patients. Sharing the savings from this intervention is critical for three reasons. First, implementing the technology is costly. Second, physicians often spend more time with these patients or hire care management nurses to assist them. Third, hospitals lose revenue because admissions decline.

IHC can only capture these savings for the health plan's own members, not for their Medicare patients, so they factor in the level of lost Medicare revenue from reduced admissions and less use of higher-reimbursed hospital care when determining whether to implement a quality improvement. In fact, although IHC did implement the community-acquired pneumonia project, the lost revenue for 10 of their small rural hospitals that first implemented it was greater than the saved costs.

Risk sharing and capitation Risk-sharing payment methods pay providers a fixed amount for furnishing a bundle of services. This creates incentives to improve quality by allowing providers to reap the savings of better care management while also putting them at risk for the increased costs of poorly managed care.[14] It can encourage the provision of preventive services, improve coordination across settings, and avoid complications due to poor quality of care. However, it also creates an incentive for providers to stint on care or to only serve the lowest-risk patients.

Our interviews with health plans revealed that capitated payment for a specific population or for a group practice often led to the development of programs to better manage care. Plans reported that when putting incentives in place, it was easier for such groups to improve quality because they had better data collection and analysis systems. However, we found few examples where purchasers or plans shared risk in order to improve quality. Most of the models relied on payments on top of a fee-for-service payment mechanism. The limited use of capitation as a quality incentive may say less about its potential to improve quality and more about the current state of the health care market and its reliance on broad, loosely organized networks of providers.

One form of risk sharing is bundling of services or care for a particular disease into a single payment, such as disease-management programs paid on a risk basis.[15] Targeting this strategy at types of health conditions for which it is well documented that high-quality care (usually good preventive care) will result in cost savings (fewer hospitalizations) helps avoid the concern that providers will stint on care to achieve savings. However, other than the CMS demonstration project, we found few examples of purchaser or plan use of these initiatives to improve quality.[16] ■

14 Whether the system is able to benefit from these savings also depends on the member staying in the system long enough. If an HMO provides excellent preventive services for some period of time to an enrollee who eventually changes plans, the other plan may actually reap those savings.

15 Most disease-management programs are simply paid a fee for their services over and above whatever the health plan would pay for an enrollee's care. While this is a tool for improving quality, we are not characterizing it as an incentive in this chapter.

16 Some state Medicaid agencies have worked with disease-management providers to develop dialysis management models using risk-sharing payment mechanisms.

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