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Pay-for-Performance in Health Care

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Pay-for-Performance in Health Care

Summary

In recent years, many health care industry leaders and policy makers have joined the call to pay health care providers different amounts based on variation in the quality of their services as determined through their achievement on quality performance measures. Proponents of these pay-for-performance systems in health care assert that such programs could help improve the quality of care while also helping to control the rate of growth in health care costs. Pay-for-performance systems have been implemented for some managed care plans that cover Medicaid beneficiaries and recently for Medicare physician payments.

A pay-for-performance system is a remuneration arrangement in which a portion of the payments is based on performance assessed against a defined measure. Typically, there is another component of the remuneration that is independent of the amount at risk. While most of the current discussions about pay-for-performance in the health care industry address quality-based measures, performance objectives and metrics could target any of a number of variables, including profitability, volume, or customer or patient satisfaction.

The elements common to all pay-for-performance programs are (1) a set of targets or objectives that define what will be evaluated, (2) measures and performance standards for establishing the target criteria, and (3) rewards — typically financial incentives — that are at risk, including the amount and the method for allocating the payments among those who meet or exceed the reward threshold.

For a pay-for-performance program to be successful, there needs to be agreement and buy-in among those being evaluated that the objectives are fair and the measures appropriate, that performance is accurately measured, and that the incentives make the effort worthwhile. Possible shortcomings and unintended consequences of a pay-for-performance program include having inappropriate measures and objectives, competing or uncoordinated efforts, insufficient or inappropriate incentives, and placing excessive focus on the reward.

There are few rigorous objective evaluations of the effect of pay-for-performance programs. Initial studies suggest that pay-for-performance programs can change performance on quality measures that are used for the basis of bonus payments, but assertions that pay-for-performance programs are cost-saving in the long run are largely unsubstantiated.

Most of the pay-for-performance legislation that Congress has considered recently has centered on the Medicare program, although Medicaid and private insurers have also garnered some attention. A number of pay-for-performance demonstration projects have been authorized, and Congress issued a directive to the Secretary of Health and Human Services to develop a value-based purchasing program for hospital payment by 2009. A provision in H.R. 6111, the Tax Relief and Health Care Act of 2006, creates a voluntary pay-for-performance system that will reward physicians an additional 1.5% of their Medicare payments for care provided between July 1 and December 31, 2007, if they met reporting requirements on quality measures. This report will be updated as needed.

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If a physician make a large incision with an operating knife and cure it, or if he open a tumor (over the eye) with an operating knife, and saves the eye, he shall receive ten shekels in money.

If a physician make a large incision with the operating knife, and kill him, or open a tumor with the operating knife, and cut out the eye, his hands shall be cut off.

— Code of Hammurabi, c. 1750 B.C.

Introduction

In recent years, many health care industry leaders and policy makers have joined the call to pay health care providers different amounts based on variation in the quality of their services as determined through their achievement on quality performance measures. Proponents of these pay-for-performance systems in health care assert that current payment systems are typically neutral with regard to differences in quality, and that pay-for-performance programs could help improve the quality of care while they also help to control the rate of growth in health care costs. Additionally, pay-for-performance has been touted as a mechanism that can accelerate the rate of adoption of health information technology and electronic medical records, and promote the delivery of more preventive services. Pay-for-performance systems have been implemented for some managed care plans that cover Medicaid beneficiaries, and proposals for establishing pay-for-performance systems for Medicare services continue to come before Congress.

This report examines the factors that need to be considered when evaluating the advantages and disadvantages of a pay-for-performance system in health care. The report first discusses the conceptual foundation for pay-for-performance systems and then addresses their strengths, potential shortcomings, and unintended consequences. Following a discussion of the potential for pay-for-performance systems to control the growth in health care costs, the report examines the track record of pay-for-performance programs in health care, keeping an emphasis on experiences in the private sector and in public demonstration projects. The report then summarizes the pay-for-performance proposals contained in bills that have been introduced before Congress, and examines potential legislation likely to come before the Congress in the coming year.

Background

A pay-for-performance system is a remuneration arrangement in which a portion of the payments is based on performance assessed against a defined measure. Typically, there is another component of the remuneration that is independent of the amount at risk. The terms merit and bonus pay are also used to describe similar systems.[1] While most of the current discussions about pay-for-performance in the health care industry address quality-based measures, performance objectives and metrics could target any of a number of variables, including profitability, volume, or customer or patient satisfaction.

Pay-for-performance systems are not new. The Code of Hammurabi (*c.* 1750 B.C.), the set of statutes from ancient Mesopotamia that ranks among the oldest collections of extant laws in history, clearly established a payment system that rewarded practitioners differentially based on the quality of the outcome of their services. More recently, pay-for-performance systems for executive compensation have become more common in many industries.[2] Health insurance company representatives have testified that pay-for-performance efforts have been implemented in the private market since the late 1990s, and that pay-for-performance programs are growing in number and scope.[3]

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[1] Although often used interchangeably, pay-for-performance can also be considered one dimension of a broader set of concepts collectively known as "value-based purchasing." Proponents of value-based purchasing emphasize the focus of each decision maker, such as an insurer, employer, or patient, on assessing differences in perceived value — whether it be in efficiency, quality, cost, or some other measure — when choosing among options. The value assessment can be specific to each decision maker, and proponents of the concept prefer the positive connotation of maximizing value, typically emphasizing quality when making health care purchasing decisions. Value-based purchasing approaches emphasize the collection and analysis of data on quality, the dissemination of quality information to providers and beneficiaries, and the selective rewarding of identified high-quality achievers through contracts, partnerships, or incentives. (See, for example, the testimony of Robert Berenson, M.D., before the Subcommittee on Health of the House Committee on Ways and Means, September 29, 2005.) Critics of pay-for-performance approaches object to the explicit assessment of health care providers against a specified standard and to linking provider reimbursement to these measures, even though many of the activities are similar to those used for value-based purchasing. The version of S. 1932 originally passed by the Senate in 2005 included provisions for establishing "value based purchasing" under Medicare, with details that reflected a pay-for-performance structure.

[2] For example, some corporate officers may have part of their compensation tied to the value of company stock or some other measure of performance.

[3] See, for example, the testimony of Karen Ignagni, President and CEO, America's Health Insurance Plans, before the House Committee on Education and the Workforce Subcommittee on Employer-Employee Relations hearing on "Examining Pay-for-Performance Measures and Other Trends in Employer-Sponsored Health Care," May 17, 2005.

Recommendations and Calls for Action

Many organizations, both private and public, have recommended changes in how health care providers are reimbursed, and have suggested moving to payment methods that are at least partially based on quality differences.

Institute of Medicine. The Institute of Medicine (IOM) has issued several reports recommending differential payments based on quality. In a seminal 1999 report, *To Err is Human: Building a Safer Health Care System*, the IOM called for initiatives to reward quality. In the 2001 report *Crossing the Quality Chasm: A New Health System for the 21st Century*, the IOM called for an increase in payments to providers of high quality care.[4] This was followed in 2006 by the report *Performance Measurement: Accelerating Improvement*, mandated as part of the Medicare Modernization Act (P.L. 108-173), which recommends the creation of a national system for performance measurement and reporting to be financed annually through funds appropriated from the Medicare Trust Funds. One recommendation urges purchasers and insurers to redesign payments to encourage providers to make positive changes to their care processes. In its most recent report, *Rewarding Provider Performance: Aligning Incentives in Medicare*, the IOM came to two conclusions regarding pay-for-performance as a payment strategy for Medicare: (1) using payment incentives to reward quality and quality improvement "can serve as a powerful stimulus to drive institutional and provider behavior toward better quality," but (2) pay-for-performance incentives alone would be insufficient without "certain operating conditions ... such as the use of electronic health records, public reporting, beneficiary incentives, and education of boards of directors."[5] These IOM reports have been influential in bringing attention to the need for quality improvement in health care and calling for variable payments based on quality.

MedPAC. For many years, Medicare Payment Advisory Commission (MedPAC) has recommended paying providers different rates based on differences in quality. In its March 2004 report, MedPAC recommended that Congress "establish a quality incentive payment policy for all Medicare Advantage plans" and "establish a quality incentive payment policy for physicians and facilities providing outpatient dialysis services."[6] MedPAC added hospitals, home health agencies, and physicians to its recommendations in its March 2005 report.[7] In the March 2006 report, MedPAC also recommends gathering information about resource use and providing information about practice patterns confidentially to physicians as "important steps to improving

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[4] Institute of Medicine, *To Err is Human: Building a Safer Health Care System* (1999); Crossing the Quality Chasm: A New Health System for the 21st Century (2001); *Performance Measurement: Accelerating Improvement* (2006); and *Rewarding Provider Performance: Aligning Incentives in Medicare* (2006). National Academy Press, Washington, DC.

[5] Institute of Medicine, *Rewarding Provider Performance: Aligning Incentives in Medicare.* National Academy Press, Washington, DC, 2006.

[6] MedPAC, *Report to the Congress: New Approaches in Medicare,* June 2004.

[7] MedPAC, *Report to the Congress: Medicare Payment Policy*, March 2005.

quality for beneficiaries and laying the groundwork for obtaining better value in the Medicare program."[8]

MedPAC's recommendations are most fully set forth in the 2005 report, which recommends that Congress give the Medicare program the ability to pay differentially based on performance. MedPAC also recommends that the Secretary of Health and Human Services (HHS) design a program that rewards both relative and absolute standards. MedPAC further recommends that the pay-for-performance system be budget-neutral, with the incentive pool to be funded by setting aside 1% or 2% of budgeted payments.[9]

Also of note is an open letter published in 2003 from health care industry leaders who recommend that "payment for performance should become a top national priority and that Medicare payments should lead in this effort." The signatories represented many research, academic, and insurance groups, and included several former Center for Medicare and Medicaid Services (CMS) administrators. The group noted that it was "not ... suggesting that such an initiative be dominated by government," but that a "major initiative by Medicare to pay for performance can be expected to stimulate similar efforts by private payers."[10]

Theory and Conceptual Foundation

Pay-for-performance systems can be structured in many ways. Incentives, bonuses, and especially performance criteria can be based on any number of dimensions. However, the elements common to all pay-for-performance programs are (1) a set of targets or objectives that define what will be evaluated, (2) measures and performance standards for establishing the target criteria, and (3) rewards — typically financial incentives — that are at risk, including the amount and the method for allocating the payments among those who meet or exceed the reward threshold.

The relationship between value and price has long engaged economists, who share no agreement on the precise relationship. However, when considering an economic commodity such as a good or service, the price, which is actual and observable, typically increases systematically, but not proportionately, with the value, which is latent and unobservable.[11] Economic theory holds that individual decision makers compare their implicit assessment of value against the explicit price to make optimal purchasing decisions. In most markets, this comparison works reasonably well, with knowledgeable buyers having sufficient information about competing products and services to keep overall prices in line with aggregate valuations of the goods or services.

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[8] MedPAC, *Report to the Congress: Medicare Payment Policy*, March 2006.

[9] MedPAC, *Report to the Congress: Medicare Payment Policy*, March 2005, p. 187.

[10] Berwick, DM et. al. "Paying for Performance: Medicare Should Lead," *Health Affairs* Volume 22, Number 6, November/December 2003. pp. 8-10.

[11] Desai, M., "Value and Price," in *The New Palgrave Dictionary of Economics*, Eatwell, J., et al., ed. The Stockton Press, New York, 1988.

In health care, this relationship between value and price has been tenuous or nonexistent because buyers and payers are not typically the patients who receive the care. The asymmetry of information on both the part of the providers (with the medical expertise) and the buyers (with knowledge of personal or group health status) has meant that neither the buyer nor seller has transparent access to information. In addition, the presence of insurers as third-party payers has removed much of the incentive for price consciousness.

Payments to health care providers historically have not been determined in a classical free market through the interaction of supply and demand, and consequently, most insurers have not made any distinctions in payments to providers who exhibit differences in quality. Reimbursements have been tied to other dimensions of care — for instance, efficiency or low cost. Pay-for-performance programs are an attempt to bring this relationship between prices and value, as reflected in quality care, into a closer balance. In theory, pay-for-performance programs in health care would be less compelling if at-risk buyers were fully informed about quality differences.

Objectives and Targets

The objectives and targets specified in a pay-for-performance system are the explicitly identified priorities and goals against which progress and achievement are to be measured. While most current discussions about pay-for-performance address quality improvement and quality-based measures, these are only one possible dimension. The objectives could address any number of goals, including costs of care, quantity of services delivered, or some combination including quality.

There are four types of performance measures typically used in measuring the quality of health care activity: clinical outcome measures, process measures, structural measures, and patient satisfaction measures.[12] Methods of defining and collecting data to address these different objectives vary in complexity and difficulty. Clinical outcomes are the preferred standard, but are rarely possible to collect in health care. Accurately assessing the consequences of a particular treatment upon the eventual outcome may require a long time. For instance, the ultimate outcome for patients with chronic conditions such as diabetes or hypertension might be the number of additional years of life, adjusted for quality, following treatment.[13]

Process measures often address the proper delivery of health care services and practice patterns (e.g., the use of diagnostic screening for those who present with a set of symptoms or the dispensing of medications such as beta-blockers to patients with

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[12] Donabedian developed the quality measurement model targeting structure, process, and outcome measures that has become widely accepted and used as the basis for much of the work addressing quality and outcomes. For further details, see Donabedian, A., *Explorations in Quality Assessment and Monitoring: Vol 1. The Definition of Quality and Approaches to Its Assessment.* Ann Arbor, MI: Health Administration Press, 1980.

[13] A quality adjusted life year (QALY) is a construct developed to adjust for differences in the quality or value of a year of life because of morbidities. A year in perfect health would have a value of 1.0 QALY, while the value of a year in ill health would be discounted to some fraction less than one, depending on the condition.

heart attacks.) Process measures are easier to gather but are not necessarily consistent with clinical outcomes; research on the evidence base for clinical practices is ongoing, but much of the variation in care is likely to remain unexplained for the foreseeable future.[14] Quite often, process measures tend to focus on underuse of services, and may thus be cost-increasing in the short run.

Structural measures that have been used in health care pay-for-performance programs include, for example, addressing whether organizations have adopted health information technology (HIT) that allows electronic medical records to be created and sent. Some of the Medicare demonstration projects include incentives to promote the use of HIT through pay-for-performance programs.[15]

Finally, patient satisfaction measures are sometimes used in pay-for-performance programs, but can be controversial. Proponents point out that patient satisfaction measures are relatively easy to collect, and some research suggests that patient satisfaction is positively linked to patient compliance and better clinical outcomes. These measures often reflect the value that patients place in the service or "consumption" dimension of health care, and physician communication is the factor most strongly associated with a high patient satisfaction score.[16] However, critics question the usefulness of patient satisfaction measures. For example, one study of elderly patients found no relationship between patient satisfaction and the technical quality of the care.[17] Partly as a consequence of this difference in perspectives, patient satisfaction measures are typically given less weight (usually less than 20%), when they are used at all.

Measures and Performance Standards

Ideally, performance is evaluated using metrics that capture and assess the behavior that has been determined to be causally related to the objectives. The performance reward standards are the benchmarks or thresholds established to determine which of the eligible bonus recipients actually qualify for extra payments. Standards can be either absolute or relative, with different implications for what behavior is being rewarded. Absolute thresholds, such as requiring that 95% of patients brought to a hospital following an acute myocardial infarction receive aspirin within an hour, or that 100% of pneumonia patients are counseled about smoking cessation,

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[14] For example, an index of 20 articles on variations in clinical practice patterns can be found at [http://content.healthaffairs.org/webexclusives/index.dtl?year=2004].

[15] For more discussion of health information technology and quality, see CRS Report RL32858, *Health Information Technology: Promoting Electronic Connectivity in Healthcare*, by C. Stephen Redhead.

[16] See, for example, Sleath, B., et al., "Physician-Patient Communication About Over-the-Counter Medications," *Social Science and Medicine,* 53(3):357-9. August 2001, and Markoul, G., et al., "Health Promotion in Primary Care: Physician-Patient Communication and Decision Making About Prescription Medications," *Social Science and Medicine.* 41(9):1241-54, November 1995.

[17] Chang, et al., "Patients' global ratings of their health care are not associated with the technical quality of their care." *Annals of Internal Medicine.* May 2, 2006. 144(9):665-72.

would reward actual levels of achievement. One advantage of having specific, targeted objectives is that there is no uncertainty on the part of those being evaluated about whether they have met the standard, whereas a relative ranking is not revealed until a later time. However, absolute thresholds may offer less of an incentive for those already above the criteria, who may not see any motivation to improve beyond their current practice, or for those far below the criteria who may feel that any effort to improve may be futile. Absolute standards may not allow for flexibility when trends outside the control of health care providers shift the experience for a large portion of the population, such as when insurers substantially change their coverage policies or when epidemics strike.

Relative standards or rankings focus on the position of each provider when compared with peers. Typically, relative rankings can be used to reward improvement, such as when a provider moves from the third quartile into the second, but high achievers have little opportunity to improve their already favorable relative portion. If incentives are successful in altering provider behavior and practice patterns, the distribution of providers along the quality measure is likely to compress. As the spread contracts, differences in ranking and quantiles may represent little practical significance — for instance, if the difference between being in the top decile or the second becomes the difference between a score of 98.5% or 99% — and relative rankings and quantiles may not be a useful distinction.

Many existing pay-for-performance systems in health care incorporate both types of standards. Applying both types of standards offers the possibility of both rewarding high achievers and stimulating improvement by lower-ranked providers. For example, an assessment prior to the implementation of a pay-for-performance program may produce a distribution across providers, from which a baseline can be established. This baseline, perhaps the cutoff point that defines the bottom quantile, might then be made the absolute criteria that all providers must meet over a defined period. Providers would then be eligible for bonuses if they improved their relative ranking — e.g., moved from the bottom half of the distribution to the top half — or if they exceeded a minimum or qualifying threshold.

Incentives and Bonus Payments

The size and source of the incentives and bonus payments may have the most significant role in determining how much of a change in behavior eventually results. Laudable objectives accurately measured and fairly evaluated may produce very little or no change if the payoff is insignificant. On the other hand, disproportionately large incentives can lead to substantial changes in behavior, even if the objective is misguided or misaligned with the incentives.

In addition, whether the payments at risk are perceived as a potential gain or a potential loss may affect the likelihood of behavior change. The incentive pool can be funded either by infusing new funds or by redistributing existing funds. Adding new money can allow for the status quo to be the worst-case scenario, but the consequence in the short run will be a more expensive total compensation package. With no other redistribution of existing payments, such additional funds would simply be a potential gain, and there would be less resistance to such a change on the part of providers. However, if the bonus payments were funded by withholding a fraction of existing

payments, then the zero-sum situation would create winners and losers, and there would be greater potential for objections to the implementation of such a system from those being evaluated.

Competitive and non-competitive rewards. Differences in the structure of pay-for-performance programs can lead to rewards that are earned either competitively or non-competitively, with different implications for budgets and for those being evaluated. Two dimensions are critical: (1) whether the performance criteria are absolute or relative, and (2) whether the bonus pool contains a fixed or an open-ended, uncapped amount of funds. Varying these two dimensions creates four possible scenarios. (See **Table 1**.)

Table 1. Pay-for-Performance Program Characteristics and Effects on the Competitiveness of the Reward

		Bonus Pool	
		Fixed	**Open-ended**
Performance Standards	**Absolute**	Certainty about qualification Uncertainty about the amount	Certainty about qualification Certainty about the (pre-determined) amount
	Relative	Uncertainty about qualification Certainty about the amount	Uncertainty about qualification Certainty about the (pre-determined) amount

Source: CRS.

Absolute performance standards combined with bonus pools that are not capped lead to non-competitive bonus awards. Participants will be fully informed about whether they have reached the bonus threshold as well as the amount of the bonus, assuming that the reward is clearly identified in advance. Participants only need to know how they performed against the qualifying threshold and do not need to know how others performed to determine whether they qualify for the reward. If the amount of the reward is previously determined, participants will also have knowledge about how much they might gain, should they achieve the standard. This is the least competitive type of pay-for-performance program, exemplified by the Quality and Outcomes Framework in place in the United Kingdom (see below), and typically requires additional monies to fund the bonus pool.

If the bonus pool is fixed but the performance standards are absolute, then the award becomes competitive. The number of providers who meet the performance standard and qualify for the extra payments could determine the size of the bonuses. When the amount of money provided for incentives is fixed, the bonus amount for each provider decreases as the number of providers who qualify increases. For

instance, if the bonuses are funded by a fractional withholding and everyone qualifies, then the best a provider can hope for is to recover the full amount before the contribution to the incentive pool. As the number of providers who qualify for the incentive payments falls, the amount of bonus per provider increases because the pool is divided among fewer recipients.

If the amount of the bonus pool is not capped but the qualifying standard is a relative measure, then the rewards are also competitive. Again, assuming the reward is clearly agreed to in advance, participants would know how much is at stake but would not know whether they qualify to receive the bonus until their performance is assessed against their peers. For instance, a pay-for-performance program may reward only the top 10% but will give those who qualify a predetermined bonus. Participants would then balance the potential gain against their likelihood of achieving top 10% status. The Premier Hospital demonstration uses this reward structure (see below).

Finally, if the amount of the bonus pool is capped and the qualifying standard is relative, the rewards are also competitive. Participants will not know whether they qualified for the bonus until their relative standing is known but may know how much the bonus will be if only a pre-determined percentage of peers will receive bonuses from a fixed pool or, alternatively, if the reward is a pre-determined fixed amount.

The relationship between the number of qualifying recipients and the amount of the bonus creates a tradeoff between a larger incentive in response to a bigger bonus payment and the proportion of the pool who achieve the standard and are therefore eligible for the extra payments. From a policy standpoint, if the objectives are truly desirable, e.g., accurate measures that truly improve the quality of patient care, then the more who meet a stringent standard the better. However, because the size of each payment decreases as more recipients qualify, the incentive effect becomes more diluted with wider success. If there is a distribution along the performance scale, then one parameter available to balance this effect is to set the qualifying standard at a level high enough so that not everyone meets the threshold but low enough so that it is potentially achievable for enough of the population targeted to encourage widespread effort. The pay-for-performance program proposed as part of S. 1932 in the 109th Congress most resembled this structure (see below). The bill would have required all the payments withheld to create the bonus pool to be distributed as awards, but allowed for an uncertain number of recipients.

One advantage of a pay-for-performance framework is that it can be incorporated into all types of existing provider payment schemes, from fee-for-service to capitation to salary. This flexibility has helped the popularity of pay-for-performance programs as payers do not have to completely undo their existing payment structure to add a pay-for-performance component. In essence, a pay-for-performance system functions as a secondary source of payment that operates in conjunction with the main remuneration arrangement. If new monies are introduced to the payment system to fund the bonus payments, then the original payment system remains intact. If the funds for bonus payments are created by withholding some portion of the primary payment system, then this can either be done prospectively, as in the case of prepaid capitation or salaried arrangements, or retrospectively through adjustments with fee-for-service, after total service quantities and payments are known.

Performance Unit for Measurement and Reward

Ideally, pay-for-performance programs would reward the agent or decision maker directly responsible for changes in the standard being measured. Accountability without responsibility is inappropriate and potentially counter-productive. Similarly, unmerited rewards are inefficient and inequitable.

Identifying and attributing cause and effect with regard to improvements in health can be difficult or even impossible. Health improvements may result from a multitude of factors in addition to health care. Furthermore, health care interventions are often collaborative efforts that may not be attributable to a single individual or health care provider. Therefore, determining the marginal contribution of each team member can be difficult and may engender unnecessary and undesirable conflicts of interest.

In practice, pay-for-performance programs vary substantially in whom they hold accountable and reward. Individual physicians, physician groups, hospitals, managed care plans, and even patients have been the subject of performance measures, evaluation and reward. Because it is possible for more than one pay-for-performance program to be in effect at the same time, it is conceivable that some patients and providers might earn bonuses from a health plan that in turn might be evaluated under a pay-for-performance program.

This wide ranging experience in pay-for-performance program design has not yet produced evidence nor even a consensus on the most effective structure for health care pay-for-performance programs. Recently initiated pay-for-performance programs take on many forms, as discussed in a later section. Some argue that managed care plans are best suited to pay-for-performance programs because their wide if not comprehensive range of health care services most closely match their responsibilities for the overall health care for its enrolled beneficiaries.[18] Until more pay-for-performance evaluation studies are completed that produce evidence identifying characteristics of the most effective and efficient programs, the variation in pay-for-performance designs is likely to continue.

Possible Shortcomings and Unintended Consequences

While pay-for-performance offers the potential for improving quality and efficiency, the success of such programs depends critically on the design and implementation. The complex interactions between incentives, rewards, and other market factors can produce perverse incentives and counterproductive results if measures and objectives are not appropriately established or are poorly constructed. The following discussion identifies a number of considerations that will determine the effectiveness of a pay-for-performance system.

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[18] See, for example, Cannon, M.F. "Pay-for-Performance: Is Medicare a Good Candidate?" 7 *Yale Journal of Health Policy, Law & Ethics* (forthcoming 2007).

Inappropriate Measures and Objectives

Appropriately matched objectives and incentives, expressed through the chosen measures, metrics, and standards for achievement, are critical to the success of any pay-for-performance system. If incentives for performance are not well aligned with the objectives, resources will be inappropriately diverted. Providers may lose faith in a program that doesn't accurately capture their honest efforts, undermining the credibility of the program and the confidence of those being evaluated. With this understanding, the IOM has recommended that Congress create a National Quality Coordination Board (NQCB) and that this board, in collaboration with federal agencies and private-sector stakeholders, "formulate and promptly pursue a research agenda to support the development of a national system for performance measurement and reporting." This agenda would include

- development, implementation, and evaluation of new measures to address current gaps in performance measurement,
- applied research focused on underlying methodological issues, such as risk adjustment, sample size, weighting, and models of shared accountability,
- design and testing of reporting formats for consumer usability, and
- valuation of the performance measurement and reporting system.

Competing or Uncoordinated Efforts

The overlap between health care providers and insurers is complex, with most providers accepting patients who are covered by a myriad of insurers. If pay-for-performance systems differ across insurers, providers will be striving to satisfy multiple performance standards simultaneously, and the effects may be diluted. While some of the performance measures may be common, particularly around clinical areas for which the evidence base is convincing and there is a consensus, there may be areas where different measures can develop. Some proponents have argued that competition in this area will be beneficial because the insurance companies will be stimulated to innovate and consumers — either employers selecting among insurance companies or employees selecting among plans — will make decisions based in part on which pay-for-performance program is most successful, however it may be measured.[19] Competition across performance standards might also lead to initiatives that address issues other than quality. These approaches may not fully acknowledge the potential for inefficiency brought about through near redundancy or even conflicting objectives. In contrast, a representative from a large insurance company has stated that the company does not wish to develop its own pay-for-performance system and is waiting for a consensus to develop on a set of the most appropriate measures and standards that it can then adopt.[20]

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[19] Cannon, M.F., op. cit.

[20] Statement by Lisa M. Latts, MD, MBA, MSPH, Vice President, Programs in Clinical Excellence, WellPoint, Inc. during the 4th Annual Quality and Pay-for-performance Conference, Boston, MA, Aug. 6-8, 2006.

A related concern is that any pay-for-performance system proposed and implemented by Medicare, as the market leader, would crowd out other innovations. As the largest payer and market leader that sets trends often followed by private insurers, Medicare's pay-for-performance activities will be closely watched and possibly copied.

Insufficient or Inappropriate Incentives

The incentives under a pay-for-performance system must be both appropriate to modify behavior toward the desired objective, and sufficient to induce the effect. Mismatched activities and targets and bonuses that don't elicit the desired results will lead to inefficiencies.

As with most incentives, there is a range of possible responses including no change in behavior. Those for whom the costs of achieving the bonus threshold exceed the potential gains may not exhibit any behavioral changes and become frustrated. At the other extreme, bonus payments to those who already meet the standard may not produce any changes in behavior either but will reward them for standards they already have reached or exceeded. In this case, the justification would be to provide incentive for those providers to continue to maintain a high level of care.

The design of incentives is most critical for the group that would change its behavior towards the desired outcome if incentives were sufficient. The difference between the costs of meeting the threshold and the potential gains to be realized will be different for different providers under different circumstances. Consequently, the policy implications will vary depending on the population, the activity targeted and the size of the potential bonus.

The appropriate size of the ideal incentive will vary, depending on what group and which objectives are being targeted. While MedPAC has suggested that 1% or 2% of total payments be withheld to fund the bonus pool, this figure may reflect very different incentives across providers. For example, a physician in solo practice who has annual gross revenues of $250,000, half of which comes from Medicare, would face a potential bonus payment of $2,500 while a hospital with annual gross revenues of $300 million, 60% of which is Medicare related, will have over $3.6 million at risk under the pay-for-performance system. In the case of the physician, the amount may not come close to the costs of meeting the pay-for-performance criteria, considering the cost of acquiring the necessary information systems (hardware and software) that may be needed, in addition to the hiring and /or training required of the staff. On the other hand, the hospital not only has much of the fixed costs of compliance in place (including automated systems and clerical staff), but the amount of the payment at risk would almost certainly make the effort worthwhile. Similarly, some have argued that pay-for-performance is best suited for managed care companies who not only would have significant amounts at stake, but would stand to recoup the benefits of any potential cost savings because of the vertically integrated nature of the care.

Excessive Focus on the Reward

Incentives can be powerful motivators and, *ceterus paribus,* the behavior being targeted will increase. The caution is that, "You get what you measure," and non-targeted areas may suffer as a result. Some other positive efforts that may be more difficult to measure, are not fully understood, or simply not targeted, could end up being neglected or underappreciated.

Pay-for-Performance and Cost Control

Pay-for-performance systems are not inherent vehicles for cost containment. Advocates of pay-for-performance believe that successful pay-for-performance programs will lead to improvements in quality and provider efficiency which in turn will lower cost.[21] However, this assertion is not necessarily true, nor is there substantial evidence to support this position. One review of the existing research finds that there are only nine randomized controlled trials of the effectiveness of pay-for-performance systems, and many of the studies are limited to a single indicator or aspect of care.[22] While a randomized controlled trial may be the gold standard for isolating and identifying the true effectiveness of an intervention, such experiments are rarely possible in social policy contexts. Pay-for-performance systems could potentially be cost-saving but also may be cost-increasing, and to examine how this might occur requires a more systematic analysis of the mechanisms for change.

Considered simply, quality improvement involves doing the wrong things less often and/or doing the right things more frequently. In practice, quality can improve by reducing or eliminating overuse or misuse, while increasing underuse. The difficulty comes in translating these generally innocuous concepts into identifiable actions and activities in health care.

To the extent that quality improvement measures in pay-for-performance systems incorporate measures of underuse, then the short-term consequence of quality improvement would be higher cost of care. Whether the long-term costs would be lower as a result of this short-term increase would depend on the ability of the care to offset potentially more expensive care later on. Examples might include the increased administration of vaccines, or the early detection of treatable cancers. If the quality improvement is achieved by eliminating overuse or misuse, the potential for cost-savings is more direct. Not only would the direct costs of the inappropriate care be avoided but the negative consequences that lead to complications and additional care, such as nosocomial infections, would be prevented.

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[21] Trude, S. Au, M., and Christianson, J. "Health Plan Pay-for-Performance Strategies," *American Journal of Managed Care.* 2006; 12:537-542.

[22] Dudley, R.A., Frolich, A., Robinowitz, D.L., Tlavera, J.A., Broadhead, P., and Luft, H.S. *Strategies to Support Quality-Based Purchasing: A Review of the Evidence.* Rockville, Maryland: Agency for Healthcare Research and Quality, publication 04-0057, 2004.

In practice, the current state of medical knowledge, management practices, and policy environment is insufficient for the identification of what the appropriate level of care is in most clinical situations. There is a movement towards more evidence-based medicine, but the state of the knowledge base is still in its early stages.[23]

The existing examples of pay-for-performance in health care and their evaluations reflect some of the shortcomings of the absence of a true experimental design and the limitations that call for reservations in generalizing the findings. Even if pay-for-performance produces the successes claimed in the sample population, the differences between the sample and non-sample populations mean that study findings cannot be simply inflated and extrapolated to represent population results. For instance, it would not be reasonable to assume that the results obtained in the sub-sample of hospitals that participated in the Premier demonstration would be reproducible in the remaining Premier hospitals that did not participate in the demonstration, let alone all non-Premier hospitals. Similarly, measures selected for the demonstration project and other current pay-for-performance efforts are likely to include the "low-hanging fruit" in the orchard of possible measures, and further successes are likely to become more difficult to achieve.

The design of pay-for-performance programs can also affect the potential for cost savings. The incentive fund for bonus payments can be created by adding more money to existing payments or by withholding a fraction of payments. While larger bonus payments may create more of an incentive, they also create an additional hurdle to achieving overall cost savings. If new money is used, the pay-for-performance program would need to generate program savings that equal or exceed the new bonus payments.

For these and other reasons, most of the claims of cost-control based on extrapolations of current pay-for-performance experiences are difficult to quantify and may be overstated. While pay-for-performance systems that emphasize quality objectives and measures have the potential for improving health and health care delivery, the degree of absolute and relative improvement possible in disparate settings and the cost-effectiveness of the efforts remains unknown.

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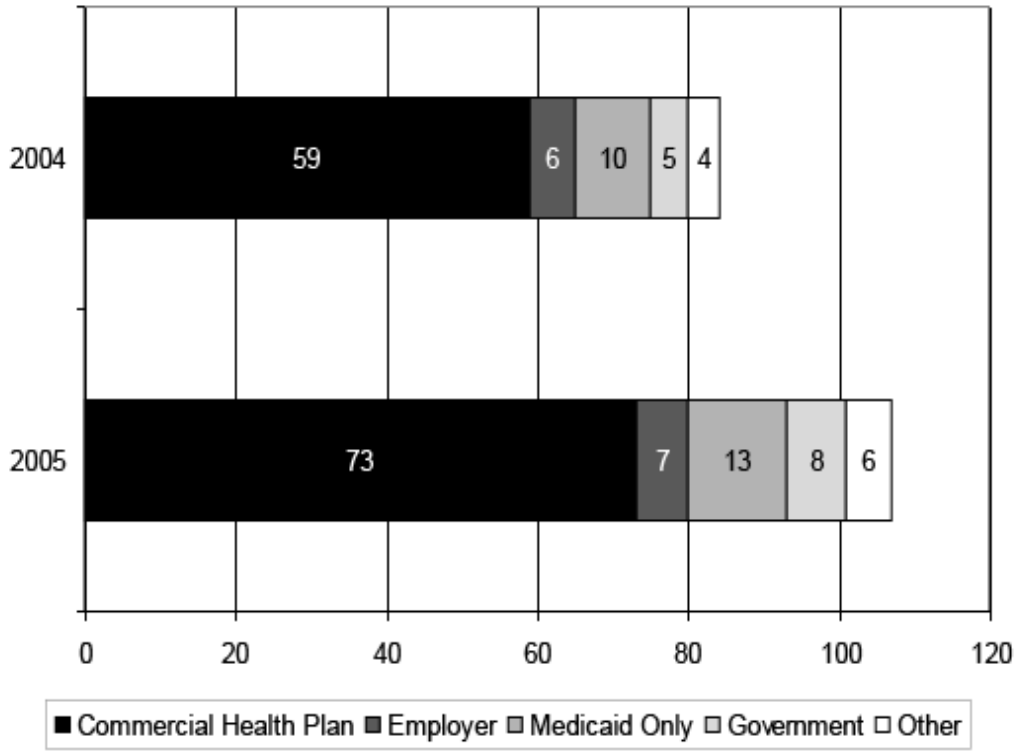
[23] Institute of Medicine, *Rewarding Provider Performance: Aligning Incentives in Medicare.* National Academy Press, Washington, DC, 2006.

Pay-for-Performance Initiatives

Pay-for-performance programs are growing in number, with most of the current programs and growth occurring among commercial health plans. According to an industry survey, 107 pay-for-performance programs were in place as of November, 2005, up from 84 the year before. (See **Figure 1**.) Similar growth is expected for the period since the survey and for the next few years. The IOM claims that more than 100 reward and incentive programs are in operation in the private sector.[24]

Figure 1. Growth in Pay-for-Performance Programs by Sponsor Type



Source: National Pay-for-Performance Survey, 2005, Med-Vantage.

[24] Institute of Medicine, *Rewarding Provider Performance: Aligning Incentives in Medicare.* National Academy Press, Washington, DC, 2006.

Pay-for-performance programs are relatively recent developments in U.S. health care and there are few rigorous objective evaluations of the effect of the programs. Initial studies suggest that pay-for-performance programs can change performance on quality measures that are used for the basis of bonus payments, but despite the declarations of some proponents, pay-for-performance as a cost-saving initiative is largely unsubstantiated. There is a scarcity of evidence that long-term cost savings are created through pay-for-performance programs, in part because many programs have only been in existence for a few years, and the long-term outlook for chronic conditions such as diabetes and heart disease, clinical conditions that are commonly the focus of pay-for-performance programs, will not be known for years after any incremental intervention. A 2004 survey of the research found that there had been only nine randomized controlled trials measuring the effects of pay-for-performance in health care at the time of the study.[25]

Public Sector

Medicare. The Centers for Medicare and Medicaid Services (CMS) currently has a number of pay-for-performance initiatives underway that encourage quality care in physicians' offices and ambulatory care facilities, hospitals, nursing homes, home health care agencies and dialysis facilities.[26] Many of these demonstrations were mandated by the Benefits Improvement and Protection Act (BIPA, 2000) or the Medicare Modernization Act (2003). The programs are summarized in **Table 2**.

[25] Dudley, et al., 2004.

[26] See the CMS website for additional information: [http://new.cms.hhs.gov/apps/media/press/release.asp?Counter=1343].

Table 2. CMS Pay-for-Performance Initiatives

Pay-for-performance Program	Summary Description
Hospitals	
Hospital Quality Initiative [MMA Section 501(b) and Deficit Reduction Act (DRA) Section 5001(a)]	All hospitals are required to report a set of quality measures in order to receive the full Medicare DRG update. Under MMA, hospitals that didn't report would have received the market basket update less 0.4% in 2005 and 2006. DRA increased the amount at risk to 2% in 2007 and subsequent years and expanded the measure set.
Premier Hospital Quality Incentive Demonstration	Financial incentives are offered to 260 hospitals for high quality, as demonstrated on 34 quality measures relating to five clinical conditions. Hospitals scoring in the top 10% will receive a 2% bonus payment. Those scoring in the next highest 10% will receive a 1% bonus. In the third year of the demonstration, those hospitals that do not meet a predetermined threshold score on quality measures will be subject to reductions in payment.
Physicians or Integrated Health Systems	
Physician Group Practice (BIPA 2000)	Ten large (200+ physicians) groups earn performance-based Medicare fee-for-service payments on quality results. The demonstration seeks to encourage coordination of Part A and Part B services, promote efficiency through investment in administrative structure and process, and reward physicians for improving health outcomes.
Care Management Performance Demo (MMA Section 649)	A three-year pay-for-performance demonstration with physicians to promote the adoption and use of health information technology to improve the quality of patient care for chronically ill Medicare patients. Focused on small and medium-sized physician practices, this demo will be implemented in four states: Arkansas, California, Massachusetts, and Utah, with the support of the Quality Improvement Organizations in those states.
Health Care Quality Demo (MMA Section 646)	A five-year demonstration program under which eligible physician groups, integrated health systems, or regional coalitions of the same, aim to enhance quality by improving patient safety, reducing variations in utilization by appropriate use of evidence-based care and best practice guidelines, encouraging shared decision making, and using culturally and ethnically appropriate care.
Disease Management/Chronic Care Improvement	
Chronic Care Improvement Program (MMA Section 721)	Participating organizations are paid a monthly per beneficiary fee for managing a population of chronically ill beneficiaries with advanced congestive heart failure and/or complex diabetes to test a population based model of disease management. Payment of fees is contingent upon performance on quality measures and satisfaction of both beneficiaries and providers.

Pay-for-performance Program	Summary Description
	After two years, pending successful interim results, this pilot may be expanded more broadly, possibly nationally.
ESRD Disease Management Demonstration (MMA Section 623)	This 3-year demonstration will test a fully case-mix adjusted payment system for an expanded bundle of end stage renal disease (ESRD) services. A portion of the payment will be linked to ESRD-related quality measures.
Disease Management Demonstration for Severely Chronically Ill Medicare Beneficiaries (BIPA 2000)	This demonstration, which began enrollment in February 2004, is designed to test whether applying disease management and prescription drug coverage in a fee-for-service environment for beneficiaries with illnesses such as congestive heart failure, diabetes, or coronary artery disease can improve health outcomes and reduce costs.
Disease Management Demonstration for Chronically Ill Dual Eligible Beneficiaries	Disease management services are being provided to dually (Medicare & Medicaid) eligible beneficiaries in Florida who suffer from advanced-stage congestive heart failure, diabetes, or coronary heart disease. The demonstration combines the resources of what had previously been the state's Medicaid pharmacy benefit with a disease management activity funded by Medicare to coordinate the services of both programs, with the goal of improving quality while lowering total program costs. The demonstration organization is being paid a fixed monthly amount per beneficiary and is at risk for 100% of its fees if performance targets are not met.
Care Management For High Cost Beneficiaries	This demonstration will test models of care management in a population of high-cost and high-risk Medicare fee-for-service beneficiaries. Participating providers are required to meet relevant clinical quality standards as well as guarantee savings to the Medicare program.

Source: CMS [http://www.cms.hhs.gov/apps/media/press/release.asp?Counter=1343].

Most of the demonstrations are still in the development stage or too early in the implementation phase to be properly evaluated. However, two projects have been in place long enough to produce preliminary results.

The Hospital Quality Initiative was mandated in MMA section 501(b). Eligible hospitals that submitted data for a "starter set" of ten quality measures in 2004 would receive the full annual payment update, while those that did not submit performance data would receive a 0.4 percentage point reduction in their annual payment update for FY2005, 2006 and 2007.[27] Although participation was voluntary, 98.3% of the hospitals reported the quality measures in the first year of the program. The Deficit Reduction Act of 2005 (DRA) increased the amount at risk to a 2% reduction, "for

[27] CMS, Hospital Quality Initiative Overview, December 2005. [http://www.cms.hhs.gov/HospitalQualityInits/downloads/HospitalOverview200512.pdf].

fiscal year 2007 and each subsequent fiscal year" and instructs the Secretary to expand the measure set.[28]

This high participation figure has been cited as evidence that pay-for-performance (or more accurately in this case, pay-for-reporting) works well and that incentive payments do not need to be very substantial in order to achieve significant results.[29] A more realistic assessment of this result might be that hospitals would have been imprudent to "leave money on the table" since the quality measures are widely used and already reported for other purposes, e.g., for Joint Commission on Accreditation of Healthcare Organizations (JACHO) accreditation and Quality Improvement Organization (QIO) programs, so the marginal cost of reporting to CMS was exceeded by the revenue gains.[30] Had hospitals not already had the infrastructure in place (information systems and staff) or if the measures had been previously uncollected or reported or less universally accepted, the participation rate almost certainly would have been lower.

In October 2003, CMS and Premier, Inc., a nationwide alliance of not-for-profit hospital facilities and healthcare systems, began a three-year pay-for-performance demonstration to test whether monetary incentives for improvements in quality measures would lead to measurable differences in quality and costs. The demonstration included 260 hospitals in 38 states. The top hospitals on 34 quality measures across 5 clinical conditions were eligible for a bonus of up to 2% of the Medicare DRG payment, which amounted to $8.85 million to the top 123 performers in the first year.[31]

The demonstration ended in September 2006 and some preliminary results are available. The first year results showed increases in composite quality scores for all five clinical areas:

- from 87 to 91 percent for patients with acute myocardial infarction (heart attack)
- from 65 to 74 percent for patients with heart failure,
- from 69 to 79 percent for patients with pneumonia,
- from 85 to 90 percent for patients who received a coronary artery bypass graft, and
- from 85 to 90 percent for patients with hip and knee replacements.

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[28] P.L. 109-171, section 5001(a).

[29] See, for example, testimony of Herb Kuhn, Director, Center for Medicare Management before the Senate Finance Committee, July 27, 2005 [http://www.cms.hhs.gov/apps/media/press/testimony.asp?Counter=1537].

[30] A full list of the hospital quality measures can be obtained from the source listed in the prior footnote. Measures include whether aspirin and beta-blockers are given at arrival and discharge to acute myocardial infarction (heart attack) patients; whether patients admitted for pneumonia receive an initial antibiotic within 4 hours of arriving at the hospital and are counseled about smoking cessation; and whether prophylactic antibiotics are received within 1 hour prior to surgical incision and discontinued within 24 hours after the end of surgery to prevent surgical infection.

[31] CMS press release, "Medicare Demonstration Shows Hospital Quality of Care Improves With Payments Tied to Quality," Nov. 14, 2005.

Premier representatives reportedly claim that the improved care achieved through the demonstration has led to 3,000 fewer deaths, 6,000 fewer medical complications, 6,000 fewer hospital admissions and 500,000 fewer days in the hospital for the participating population. Furthermore, "improvement in evidence-based quality measures is expected to save Medicare money over time because [of] the demonstrated relationship to improved patient health, fewer complications and fewer hospital readmissions."[32]

While the achievements are admirable, the results and implications for adopting the program more widely should be interpreted with caution. There is self-selection at work both in the study sample of hospitals and in the measures chosen for the program. Not all Premier hospitals participated in the study, and there likely would have been a difference in the experience of organizations who voluntarily chose to participate compared to those that did not. Similarly, extending the program to more difficult clinical areas or to objectives and measures where the evidence base is not so settled would also produce more tempered results.

Medicare Quality Improvement Organizations (QIOs) have been given a role in the Medicare Care Management Performance Demonstration (MCMP), mandated by the MMA and set to be launched in four states (Arkansas, California, Massachusetts, and Utah). The MCMP seeks to encourage the dissemination and adoption of HIT and the electronic reporting of quality measures through a pay-for-performance program. As part of their scope of work, QIOs are offering assistance to physicians' offices in the adoption of health information technology, patient-focused care processes, and clinical measures reporting through tools and methods developed in the Doctors Office Quality - Information Technology (DOQ-IT) pilot project.[33] Physicians can earn an annual clinical bonus of up to $10,000 per year over three years ($50,000 per practice) based on composite scores of quality measures over four clinical areas as well as an additional 25% of the clinical bonus (up to $2,500 per physician, $12,500 per practice) for reporting the data electronically.[34]

While not a pay-for-performance project by itself, the Physician Voluntary Reporting Program (PVRP) may lay the groundwork for establishing the types of reporting pathways that will be critical to any future CMS pay-for-performance program. Launched in October 2005 with data collection beginning in January 2006, the goal of the PVRP is to gather data about, "the quality of care provided to Medicare beneficiaries in order to identify the most effective ways to use the quality measures in routine practice and to support physicians in their efforts to improve quality of care." CMS states that, "the objective of the PVRP is to help physicians obtain information

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[32] CQ Healthbeat, "Premier P4P Demo Shows Better Care Cuts Health Costs," June 20, 2006.

[33] The Doctor's Office Quality - Information Technology (DOQ-IT) program is a national initiative that promotes the adoption of Electronic Health Record (EHR) systems to improve quality and safety for Medicare beneficiaries in small- and medium-sized physician offices.

[34] Presentation by Jody Blatt, Medicare Demonstrations Program Group, Office of Research, Development & Information, Centers for Medicare & Medicaid Services at the 4th Annual World Congress Leadership Summit on Healthcare Quality and Pay-for-Performance, Boston, MA, Aug. 7, 2006.

they can use to improve quality and avoid unnecessary costs," and will provide feedback to physicians as early as July 2006 on their level of performance based upon the data submitted.

Medicaid. Pay-for-performance systems have recently been introduced to state Medicaid programs either directly by the state agencies or indirectly through Medicaid managed care plans. Several states, including California, Iowa, Massachusetts and New York, have incorporated financial or other bonuses based on achieving quality measures into their managed care contracts. These quality measures are often adopted from the National Committee for Quality Assurance's Health Plan Employer Data and Information Set (HEDIS).[35]

The pay-for-performance features have varied across states. For example, health plans participating in the New York Medicaid program who qualified to receive bonus payments were awarded an additional 1% of monthly capitation payments. In California, budget restrictions prevented the awarding of bonus payments, however plans that scored higher on quality measures were given preference by the state when assigning Medicaid beneficiaries who failed to select a health plan on their own.

Finally, CMS is also conducting a pay-for-performance demonstration project for Medicare and Medicaid dual eligibles. The Disease Management Demonstration for Chronically Ill Dual Eligible Beneficiaries targets eligible beneficiaries in Florida who suffer from advanced-stage congestive heart failure, diabetes, or coronary heart disease and provides disease management services and drug coverage under a capitation framework. The demonstration organization is at risk for 100% of its fees if performance targets are not met, with any potential savings shared equally between CMS and the demonstration organization.[36]

Private Sector

Several pay-for-performance programs have been implemented by insurers and employers in the private sector and others are continuing to be developed and introduced. Two of the earliest and most widespread efforts, one that focuses on physicians and the other on hospitals, are described here.

Bridges to Excellence. Bridges to Excellence (BTE) is a not-for-profit multi-state, multi-employer coalition developed by employers, physicians, healthcare services researchers and other industry experts created to encourage and reward quality in health care.[37] BTE currently has three pay-for-performance programs in operation:

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[35] Foubister, V. "Pay-for-performance in Medicaid," *Quality Matters: April Update,* The Commonwealth Fund, April 2005.

[36] CMS Office of Public Affairs, Fact Sheet released Monday, Jan. 31, 2005 [http://www.cms.hhs.gov/apps/media/press/release.asp?Counter=1343].

[37] Bridges to Excellence participants include groups affiliated with the National Business Coalition on Health (NBCH), large employers, health plans, the National Committee for Quality Assurance, the American Board of Internal Medicine, and several Quality Improvement Organizations. Participants share the goal of "improving health care quality

(continued...)

the Physician Office Link, the Diabetes Care Link and the Cardiac Care Link. Each program rewards financial bonuses to physicians who satisfy the performance criteria.

The Physician Office Link program encourages the adoption and use of health information technology. Incentives are based on the physician office's implementation of specific processes to reduce errors and increase quality, including the adoption and use of electronic medical records that have been certified by the Certification Commission for Health Information Technology. Physicians can earn up to $50 per year for each patient covered by a participating employer or plan.

The Diabetes Care and Cardiac Care Link programs reward physicians who demonstrate high performance in diabetes or cardiac care over a one- or three-year period. Physicians can receive a bonus (up to $80 for each diabetic patient and $160 for each cardiac patient) covered by a participating employer and plan. Patients are provided with products and tools "to help [them] get engaged in their care, achieve better outcomes, and identify local physicians that meet the high performance measures." BTE claims that the cost to employers is no more than $175 per diabetic patient per year with savings of $350 per patient per year and no more than $200 per cardiac patient per year with savings up to $390 per patient per year.

Leapfrog. The Leapfrog Hospital Rewards Program is a pay-for-performance program that rewards hospitals "that demonstrate excellence and/or sustained quality and efficiency improvement."[38] Data are collected and performance is measured in five clinical areas that account for 20% of commercial inpatient spending and 33% of commercial admissions: coronary artery bypass graft (CABG); percutaneous coronary intervention (PCI); acute myocardial infarction (AMI); community acquired pneumonia (CAP); and deliveries/newborn care. The program claims to produce savings from reduced lengths of stay due to complications and reductions in re-admission rates as a result of improvements in quality. Because the data is already collected for surveys needed by the Joint Commission on the Accreditation of Heathcare Organizations (JCAHO), a national accrediting organization, the program claims that there is no additional reporting burden for participating hospitals. The program is standardized and marketed commercially.

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[37] (...continued)
through measurement, reporting, rewards and education." For further information, see [http://www.bridgestoexcellence.org/bte/about_us/home.htm].

[38] The Leapfrog Group is a voluntary program consisting of organizations that buy health care. The group applies employer purchasing power to recognize and reward "big leaps" in health care safety, quality and customer value. The consortium includes Fortune 500 companies and other large private and public health care purchasers. Additional information is available at [http://www.leapfroggroup.org/about_us/leapfrog-factsheet].

United Kingdom's Quality and Outcomes Framework

There have been several attempts over the last few decades to pay health care providers differentially according to quality in the United Kingdom, but it was only in 2003 that a new "Quality and Outcomes Framework" (QOF) was put in place that systematically reimbursed providers for successfully achieving pre-defined quality improvement standards.[39] Under the QOF, general practitioners can earn up to 25% of their incomes in incentive payments by meeting certain clinical and access indicators. Up to 1000 points can be earned for achievement against a set of 136 performance measures for clinical care, practice organization, and patient experience, with another 50 points available for providing prompt access to services. The points are directly translatable to bonuses (in pounds sterling £) paid annually.

While apparently successful, the experience in the UK may not be very indicative of pay-for-performance systems under consideration in the U.S. First, the U.K. QOF applies only to family practitioners, who comprise about half of the medical workforce of the National Health Service (NHS) and derive the majority of their income from NHS patients.[40] In contrast, only 10.4% of the practicing physicians in the U.S. are in family medicine or general practice.[41]

Second, this program was successful in large part because additional funds were available for the government to provide bonus payments. The Ministry of Health originally expected that the average score would be around 750 but instead, the average score in the first year was over 950. This required the NHS to provide £1.0 billion ($1.8 billion) of new money to cover the bonus payments.[42]

Third, practitioners in the NHS may omit certain patients who meet exclusionary criteria from the calculation of the performance measures (both the numerator and the denominator).[43] While this may lead to the manipulation of the system, the evidence is inconclusive as to whether substantial "gaming" is occurring.

Physicians and Pay-for-Performance

Ideally, a successful pay-for-performance program would include general agreement and buy-in among those being evaluated that the objectives are fair, that their performance is being measured accurately, and that the incentives make the effort worthwhile. Having the support of physicians is critical; clinical measures will differ

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[39] Roland M. "Linking Physicians' Pay to the Quality of Care — A Major Experiment in the United Kingdom." *New England Journal of Medicine*, 351: 1448-54, 2004.

[40] Ibid.

[41] American Medical Association, *Physician Characteristics and Distribution in the U.S., 2006 edition.*

[42] Roland, M. presentation to the 4th Annual World Congress Leadership Summit on Healthcare Quality and Pay-for-Performance, Boston, MA, Aug. 7, 2006.

[43] Patients could be excluded from the QOF performance calculations if they refused to be included, if they were not clinically appropriate, if they were newly diagnosed or recently registered, or if they were already on maximum doses of medication.

for each specialty and will need to be developed in conjunction with practitioners to insure that they are appropriate and practical.

Pay-for-performance issues have created an uneven relationship between the professional medical societies and Congress over recent months. The AMA initially objected to the CMS PVRP, claiming that the PVRP would create additional administrative burdens and lead to an eventual mandate on performance measures. In turn, "physician concerns about the initial CMS Physician Voluntary Reporting Program proposal were interpreted on Capitol Hill as a sign of opposition to quality reporting."[44] In response to these and other comments, CMS revised the program to address some of the concerns about administrative burden, for instance, by reducing the number of core measures from 36 to 16.[45]

The various medical societies also have had difficulties coming to agreement on developing performance criteria that could potentially be used in pay-for-performance programs. On December 5, 2005, the American Medical Association (AMA) sent a letter to CMS stating that the organization would oppose efforts to adopt a pay-for-performance system under Medicare unless Congress repeals the current method for calculating yearly physician payment increases.[46] On December 16, 2005, the AMA leadership and chairs of three committees or subcommittees of jurisdiction co-signed a working agreement to develop "a starter set of evidence-based quality measures" for "a total of approximately 140 physician performance measures covering 34 clinical areas" by the end of 2006 that would be used "to implement ... reforms to address payment and quality objectives." The agreement also stated that physicians would voluntarily report on "at least 3 to 5 quality measures per physician" and "receive an additional quality update to offset administrative costs." Furthermore, physician groups "will have developed performance measures to cover a majority of Medicare spending for physician services" by the end of 2007.[47]

This working agreement was criticized by some for being premature, especially by specialty physicians. In a January 26, 2006 letter to the Committee chairs, the Alliance of Specialty Medicine, a coalition of 13 national medical specialty societies, expressed its belief that, "through a collaborative and thoughtful process, a value-based purchasing system is possible," and emphasized that, "[t]o succeed, any national quality measurement initiative must work with the realities of specialty medicine, be specialty specific, and be developed by the specialty societies with expertise in the area of care in question." The Alliance stated that, "this [AMA] agreement binds

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[44] AMA memo to State Medical Associations and National Medical Specialty Societies, Feb. 7, 2006. Copy obtained from [http://www.insidehealthpolicy.com/secure/data_extra/dir_06/he2006_0548_1.pdf].

[45] CMS, Physician Voluntary Reporting Program Overview [http://www.cms.hhs.gov/PVRP/01_Overview.asp].

[46] The current formula for determining yearly increases in physician payment under Medicare is based on the Sustainable Growth Rate (SGR), which mandates decreases in payments for physicians for the next several years. See CRS Report RL31199, *Medicare: Payments to Physicians*, by Jennifer O'Sullivan.

[47] "Joint House-Senate Working Agreement With the AMA," signed on December 16, 2005 [http://www.insidehealthpolicy.com/secure/data_extra/dir_06/he2006_0548_2.pdf].

organizations to time lines and processes that may not be able to be accomplished by all medical societies," and expressed concern that there was no assurance that doctors would be adequately paid for treating Medicare patients.[48]

The AMA claimed a misunderstanding and denied that it had over-promised. In a memo to State Medical Associations and National Medical Specialty Societies, the AMA stated that, "The commitment to develop 140 physician performance measures and to cover a majority of Medicare spending represents work either already completed by the [Physician Consortium for Performance Improvement] or was in the planning stages at the end of [2005]," and that the AMA "did not commit any individual state or national specialty society to the activities outlined in the agreement." These events illustrate the sensitivity of the issue and the difficulty in achieving consensus on developing appropriate quality metrics.[49]

Legislative Activity

In recent years, Congress has considered legislation that would implement pay-for-performance in health care. Most of the efforts have centered on the Medicare program, although Medicaid and private insurers have also garnered some attention. A number of pay-for-performance demonstration projects have been authorized, and Congress issued a directive to the Secretary of Health and Human Services to develop a value-based purchasing program for hospital payment by 2009. H.R. 6111, the Tax Relief and Health Care Act of 2006, creates a voluntary pay-for-performance system for physicians who serve Medicare patients that will pay bonuses based on the satisfactory reporting of quality measures.

S. 1932, the Deficit Reduction Act of 2005

In the fall of 2005, during the budget reconciliation deliberations that led to the Deficit Reduction Act of 2005 (P.L. 109-171, DRA), the Senate passed S. 1932, a bill that contained language to establish a pay-for-performance program under the Medicare program.[50] The proposals in S. 1932 would have established value-based purchasing systems for each of the different Medicare providers. There would be separate value-based purchasing programs for hospitals, physicians and other practitioners, Medicare managed health care plans and prescription drug plans, ESRD providers and facilities, home health agencies, and skilled nursing facilities. Although the specifics of each program differed in the details, they all shared some general principles.

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[48] Alliance of Specialty Medicine letter to Committee chairs Barton, Grassley, and Thomas, Jan. 26, 2006. Copy available from [http://www.insidehealthpolicy.com/secure/data_extra/dir_06/he2006_0569.pdf].

[49] AMA memo from Maves, M. to State Medical Associations and National Medical Specialty Societies, "Joint House-Senate Working Agreement with the AMA," Feb. 7, 2005.

[50] S. 1932 contained many elements of S. 1356, the Medicare Value Purchasing Act of 2005, a bill introduced by Sen. Grassley at the end of June 2005.

- The value-based purchasing programs would begin collecting data on quality measures in the initial year of establishment, with incentive payments disbursed in subsequent years. Data from the initial year would be used to inform providers what their payments would have been for the year had the value-based purchasing program already been in place.

- Following MedPAC's recommendation, each value-based purchasing program would create an incentive pool funded by withholding up to 2% of total payments to that category of provider. The percentage of funds that goes towards the incentive pool would not decrease over time, and all funds collected for the year incentive pool must be paid to qualifying providers as incentive payments under the program for that year.

- Participation in the value-based purchasing program would be voluntary, but providers would be required to report quality data in order to be eligible for incentive payments.

- Incentive payments would be paid to providers who meet certain thresholds for quality measurement. These thresholds would be based on either relative or absolute standards.

- The quality measures would be specific to each category of providers and would be revised over time, but the measures would be required to be evidence-based, easy to collect and report, address process, structure, outcomes, beneficiary experience, efficiency, over- and underuse of health care, and to address disparities in health care provided and health outcomes between majority and minority groups. In the initial year, the measures would include at least one measure of health information technology infrastructure.

- Because all the funds collected under the value-based purchasing programs would be paid out as incentive payments, the total payments over time would not change as a result of these provisions, but the timing of the incentive payments would be delayed a year compared to payments made in the absence of the value-based purchasing programs.

Eventually, only two pay-for-performance provisions from those deliberated as part of the DRA passed and became law: section 5001(b) requires that the Secretary of Health and Human Services (HHS) develop a plan to implement a value based purchasing program for Medicare hospital payments beginning with FY2009, and section 5201(d) requires MedPAC to develop recommendations for a value based payment system for Medicare home health services.[51]

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[51] Another provision establishes quality adjustments in Medicare inpatient hospital payments for certain hospital acquired infections, but not in a pay-for-performance framework.

The requirement for the development of a hospital pay-for-performance system for Medicare payments does not include detailed specifics about such a program. The general guidelines contained in the statute require the value-based purchasing program to include the following: on-going development, selection, and modification of measures of quality and efficiency in hospital inpatient settings; the reporting, collection, and validation of quality data; the establishment of thresholds and standards that would substantiate value based payments and the source of such funds; and the disclosure of information on hospital performance.[52]

DRA also included a provision that requires MedPAC to develop recommendations for a detailed structure of value based payment adjustments for home health services under the Medicare program by June 1, 2007. Specifically, the report is to include recommendations concerning the determination of thresholds for payments, the size of value based payments, the sources of funds for these payments, and the relationship of payments to the improvement and attainment of quality.

H.R. 3617, the Medicare Value-Based Purchasing for Physicians' Services Act of 2005

In July 2005, Ways and Means Health Subcommittee Chair Johnson and several co-sponsors introduced the Medicare Value-Based Purchasing for Physicians' Services Act of 2005. This bill would establish a value-based purchasing program under Medicare based on measures of quality ("Q-measures") and efficiency ("E-measures"). Among other things, these measures were to be, "evidence-based, if pertaining to clinical care, ... consistent, valid, practicable, and not overly burdensome to collect, ... and relevant to physicians and other practitioners [and Medicare beneficiaries]." Each physician specialty organization would have been requested to submit measures to a "consensus-building organization," such as the National Quality Forum, that would then submit recommendations to the HHS Secretary. The measures would be used to rate physicians to determine whether the physicians' billing unit would be eligible for the performance incentive (an increased annual update).[53]

H.R. 6111, the Tax Relief and Health Care Act of 2006

In December 2006, Congress passed legislation implementing a voluntary quality reporting system that ties a portion of the payments for Medicare professional services to the reporting of claims data.[54] Physicians and other eligible professionals who provide health care services to Medicare beneficiaries between July 1 and December 31, 2007, and who satisfactorily report the quality information, would be eligible for a bonus payment based on their Medicare reimbursement for the same period.

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[52] P.L. 109-171, Section 5001(b).

[53] This bill also would have eliminated the method of calculating annual Medicare physician payment updates in accordance with the Sustainable Growth Rate (SGR).

[54] The legislation also overrides the 5% cut that would have taken effect due to adjustments based on the SGR and provides for a 0% update, on average, to Medicare physician payments for 2007.

The pay-for-performance measures to be used as the basis for this bonus are borrowed from an existing CMS program. For covered professional services furnished beginning July 1, 2007, and ending December 31, 2007, the quality reporting measures are those identified as physician quality measures under the CMS Physician Voluntary Reporting Program (PVRP). The set of quality measures may be modified until April 1, 2007; however, no measures may be added or removed after that date, although modifications or refinements to previously published quality measures are allowed (without notice or opportunity for public comment) up until July 1, 2007.

To qualify for the bonus, providers must meet reporting guidelines. Eligible professionals who (1) furnish services for which there are established quality measures as described above and (2) satisfactorily submit quality measures would be paid a single additional bonus payment amount equal to 1.5% of the allowed charges for covered professional services furnished during the reporting period. The bonus incentive payments would be paid from the Supplemental Medical Insurance Trust Fund (Part B).[55]

Satisfactory reporting of data determines whether the provider is eligible for the bonus payment. If there are no more than three quality measures that are applicable to the professional services provided, the provider must report each measure for at least 80% of the cases to meet the criteria. If there are four or more quality measures that are applicable, the provider must report at least three of the quality measures for at least 80% of the cases.

CMS would have the authority to determine whether providers qualify for and receive the bonus. This would include the ability to validate (by sampling or other means) to determine if the reported measures are applicable to the professional services provided. If CMS determines that an eligible professional has not reported applicable measures, the provider would not receive the bonus. The provision also places a limit on bonus payments.[56]

The pay-for-reporting program established by H.R. 6111 might be transitory. For 2008, the quality measures would change to a set of measures adopted or endorsed by a consensus organization (such as the National Quality Forum or AQA, originally known as the Ambulatory Care Quality Alliance) that includes measures that have been submitted by a physician specialty organization developed through a consensus-based process. The CMS administrator would publish a proposed set of quality measures for 2008 in the Federal Register no later than August 15, 2007, with

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[55] These bonus incentive payments would not be taken into account in the calculations and determination of payments for providers in health professional shortage areas or Physician Scarcity Areas.

[56] CMS would estimate the average per measure payment amount (APMPA) equal to (the total amount of allowed charges under Medicare part B for all covered professional services furnished during the reporting period on claims for which quality measures are reported) divided by (the total number of quality measure for which data are reported during the reporting period under the physician reporting system). No provider would receive payments in excess of the product of the total number of quality measures for which data are submitted and three times the average per measure payment amount.

a public comment period. The final set of measures appropriate for eligible professionals to use to submit quality data in 2008 would be published no later than November 15, 2007. H.R. 6111 does not specify what bonus, if any, would be obtainable in 2008.

Proposals that incorporate pay-for-performance components for reforming public health care programs such as Medicare are likely to continue to come before Congress. While the potential for improving the quality and efficiency of health care is encouraging, the claims of improved quality with simultaneous cost savings will undoubtedly be carefully weighed against the evidence of proven results that can be generalized to larger populations and other settings and situations in the health care industry.