



Health Policy Brief

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Pay-for-Performance. New payment systems reward doctors and hospitals for improving the quality of care, but studies to date show mixed results.

WHAT'S THE ISSUE?

“Pay-for-performance” is an umbrella term for initiatives aimed at improving the quality, efficiency, and overall value of health care. These arrangements provide financial incentives to hospitals, physicians, and other health care providers to carry out such improvements and achieve optimal outcomes for patients.

Pay-for-performance has become popular among policy makers and private and public payers, including Medicare and Medicaid. The Affordable Care Act expands the use of pay-for-performance approaches in Medicare in particular and encourages experimentation to identify designs and programs that are most effective.

This policy brief reviews the background and current state of public and private pay-for-performance initiatives. In theory, paying providers for achieving better outcomes for patients should improve those outcomes, but in actuality, studies of these programs have yielded mixed results. This brief also discusses proposals for making these programs more effective in the future.

WHAT'S THE BACKGROUND?

For decades, policy makers have been concerned with the incentive structure built into the US health care system. The predominant fee-for-service system under which providers are paid leads to increased costs by rewarding

providers for the volume and complexity of services they provide. Higher intensity of care does not necessarily result in higher-quality care, and can even be harmful.

MANAGED CARE: During the 1990s payers focused on managed care arrangements to reduce excessive or unnecessary care, for example, by paying providers by capitation, or a lump sum per patient to cover a given set of services. However, concerns about potentially compromised quality and constraints on patients having access to providers of their choice led to a backlash from both providers and consumers.

Also, by the early 2000s, serious deficiencies in the quality of US health care had been highlighted in two major reports by the Institute of Medicine, among other studies. In this context, pay-for-performance emerged as a way for payers to focus on quality, with the expectation that doing so will also reduce costs.

The typical pay-for-performance program provides a bonus to health care providers if they meet or exceed agreed-upon quality or performance measures, for example, reductions in hemoglobin A1c in diabetic patients. The programs may also reward improvement in performance over time, such as year-to-year decreases in the rate of avoidable hospital readmissions.

Pay-for-performance programs can also impose financial penalties on providers that

40+

Private-sector programs

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fail to achieve specified goals or cost savings. For example, the Medicare program no longer pays hospitals to treat patients who acquire certain preventable conditions during their hospital stay, such as pressure sores or urinary tract infections associated with use of catheters.

The quality measures used in pay-for-performance generally fall into the four categories described below.

- *Process* measures assess the performance of activities that have been demonstrated to contribute to positive health outcomes for patients. Examples include whether or not aspirin was given to heart attack patients or whether patients were counseled to quit smoking.

- *Outcome* measures refer to the effects that care had on patients, for example, whether or not a patient’s diabetes is under control based on laboratory tests. Use of outcome measures is particularly controversial in pay-for-performance because outcomes are often affected by social and clinical factors unrelated to the treatment provided and beyond the provider’s control. For example, providers may follow practice guidelines regarding monitoring blood sugar levels and counseling diabetic patients regarding their diet, but ultimately, the patients’ eating and exercise behaviors will determine control of their diabetes. Increasingly, outcome measures also include cost savings.

- *Patient experience* measures assess patients’ perception of the quality of care they have received and their satisfaction with the care experience. In the inpatient setting, examples include how patients perceived the quality of communication with their doctors and nurses and whether their rooms were clean and quiet.

- *Structure* measures relate to the facilities, personnel, and equipment used in treatment. For example, many pay-for-performance programs offer incentives to providers to adopt health information technology.

PRIVATE-SECTOR INITIATIVES: More than 40 private-sector pay-for-performance programs currently exist. One of the largest and longest-running private-sector pay-for-performance programs is the California Pay for Performance Program, which is managed by the Integrated Health Association, a non-profit, multistakeholder group that promotes

quality improvement, accountability, and affordability in health care. Founded in 2001, the California Pay for Performance Program is the largest physician incentive program in the United States. It has focused on measures related to improving quality performance by physician groups and is transitioning to include value-based cost measures starting in 2014.

A more recent initiative is the Alternative Quality Contract, which was implemented in 2009 between Blue Cross Blue Shield of Massachusetts and seven provider groups (since increased to 11). Under the program, the providers receive a budget to take care of their patients rather than payments for separate services. The budget includes pay-for-performance bonuses if certain quality targets are met. In the first year of the program, a study by Harvard Medical School researchers found reduced medical spending and improved quality of patient care relative to a comparable group of providers paid through the traditional fee-for-service approach.

PUBLIC-SECTOR INITIATIVES: In the public sector, the Centers for Medicare and Medicaid Services (CMS) has established a Value-Based Purchasing Program to provide incentives for physicians and providers to improve the quality and efficiency of care (Exhibit 1). CMS has also been involved in a number of pay-for-performance demonstration projects testing a variety of approaches among different categories of providers.

The largest and most notable of these has been the Premier Hospital Quality Incentive Demonstration project. From 2003 to 2009, CMS and Premier, a nationwide hospital system, tested the extent to which financial bonuses would improve the quality of care provided to Medicare patients with certain conditions, including acute myocardial infarction, heart failure, and pneumonia.

Another major CMS demonstration was the Physician Group Practice Demonstration, a program in which group practices could share cost savings with Medicare as long as they met targets for quality of care. Results of these initiatives are discussed below.

Many states have also experimented with pay-for-performance in their Medicaid and Children’s Health Insurance Program initiatives. One of the largest of these has been the Massachusetts Medicaid’s hospital-based pay-for-performance program, which was ini-

Change in payments

Medicare's Hospital Value-Based Purchasing Program will alter payments to almost two-thirds of acute care hospitals by only a fraction of 1 percent.

tiated in 2008. Under this program, hospitals received incentive payments based on their scores for a set of quality indicators related to care for pneumonia (for example, providing antibiotics within six hours of arrival) and surgical infection prevention (for example, giving prophylactic antibiotics within one hour of surgical incision).

Most early pay-for-performance experiments narrowly focused on “quality” with very little, if any, consideration of cost. However, the field has been evolving and many programs now address overall value by incorporating both quality and cost as major design elements. The Affordable Care Act, in fact, explicitly pushes CMS in this direction, as explained below.

WHAT'S IN THE LAW?

The Affordable Care Act includes a number of provisions designed to encourage improvements in the quality of care. Some are not, strictly speaking, pay-for-performance programs. For example, Medicare's Hospital Readmissions Reduction Program, which took effect on October 1, 2012, can reduce payments by 1 percent to hospitals that have excessively high rates of avoidable readmissions for patients experiencing heart attacks, heart failure, or pneumonia.

Perhaps the best known of the programs under the law that will pay for performance are accountable care organizations (ACOs)—

groups of providers that agree to coordinate care and to be held accountable for the quality and costs of the services they provide. (See the [Health Policy Brief](#) published on January 31, 2012, for more information on Medicare ACO demonstration projects.) Three other programs are described below.

- **Value-based purchasing.** The Affordable Care Act also expands pay-for-performance efforts in hospitals by establishing a Hospital Value-Based Purchasing Program. Starting October 1, 2012, hospitals will be rewarded for how well they perform on a set of quality measures as well as on how much they improve in performance relative to a baseline. The better a hospital does on its quality measures, the greater the reward it will receive. The law also requires CMS to develop value-based purchasing programs for home health agencies; skilled nursing facilities; ambulatory surgical centers; specialty hospitals, such as long-term care facilities; and hospice programs.

- **Physician quality reporting.** The health care law also extends through 2014 the Medicare Physician Quality Reporting System that provides financial incentives to physicians for reporting quality data to CMS. Beginning in 2015 the incentive payments will be eliminated, and physicians who do not satisfactorily report quality data will see their payments from Medicare reduced. (See the [Health Policy Brief](#) published on March 8, 2012, for more information on public reporting of quality and costs.)

- **Medicare Advantage plan bonuses.** The Affordable Care Act also provides for bonus payments to Medicare Advantage plans that achieve at least a four-star rating on a five-star quality rating scale, beginning in 2012. In November 2010 CMS announced that it would replace this provision with a demonstration project in which bonus payments would be awarded to Medicare Advantage plans that have at least an average of three stars and would increase the size of bonuses for plans with four or more stars.

EXHIBIT 1

Overall Goals of Value-Based Purchasing in Medicare

Financial viability	The financial viability of the traditional Medicare fee-for-service program is protected for beneficiaries and taxpayers
Payment incentives	Medicare payments are linked to the value (quality and efficiency) of care
Joint accountability	Providers have joint clinical and financial accountability for health care in their communities
Effectiveness	Care is evidence based and outcomes driven to better manage diseases
Ensuring access	Restructured fee-for-service system provides ensured access to high-quality, affordable care
Safety, transparency	Beneficiaries receive information on the quality, cost, and safety of their care
Smooth transitions	Payment systems support well-coordinated care across providers and settings
Improved technology	Electronic health records help providers deliver high-quality, efficient, and coordinated care

WHAT ARE THE CONCERNS?

Studies on the effects of pay-for-performance have found mixed results. For example, a study of the Premier Hospital Quality Incentive Demonstration project mentioned earlier, led by Rachel M. Werner at the University of Pennsylvania, found that hospitals in the

15%

Dual-eligible beneficiaries

Cost reductions in the Medicare Physician Group Practice Demonstration were greatest for the 15 percent of beneficiaries who were eligible for both Medicaid and Medicare.

demonstration initially showed promising improvements in quality compared to a control group. However, the effects were short lived, and after the fifth year of the demonstration, there were no significant differences in performance scores between participating hospitals and a comparison group of hospitals not in the project (Exhibit 2). A possible explanation is that performance was improving broadly across all hospitals, as discussed more fully below.

A separate study of the Medicare Premier Hospital Quality Incentive demonstration program, led by Ashish Jha of the Harvard School of Public Health, analyzed 30-day mortality rates for patients with acute myocardial infarction, congestive heart failure, pneumonia, or coronary artery bypass graft surgery between 2004 and 2009. The results showed no difference in mortality rates between hospitals in the Premier demonstration and a control group of nonparticipating hospitals.

As noted, one possible explanation for the lack of difference between participating hospitals and comparison groups was due to another CMS policy intervention—namely, public reporting of hospital performance—which may have motivated hospitals broadly to improve their performance. While the Premier demonstration was under way, the Department of Health and Human Services rolled out its [Hospital Compare](#) website, which publicly

reports quality-of-care measures at more than 4,000 Medicare-certified hospitals.

Many hospitals reportedly worried about being publicly “shamed” if they displayed poor performance, and so they endeavored to close the quality gap. Many hospital administrators surveyed by researchers at the RAND Corporation also said they began to “shadow” the Premier demo and make improvements on their own, anticipating that CMS would implement pay-for-performance across all hospitals.

CHALLENGES IN DESIGN: In another study assessing the likely effects of Medicare’s Hospital Value-Based Purchasing Program, Werner and coauthors calculated that payments to almost two-thirds of acute care hospitals will be altered by only a fraction of 1 percent. This low of an incentive, she and colleagues wrote, raises questions about whether the program will substantially alter the quality of hospital care.

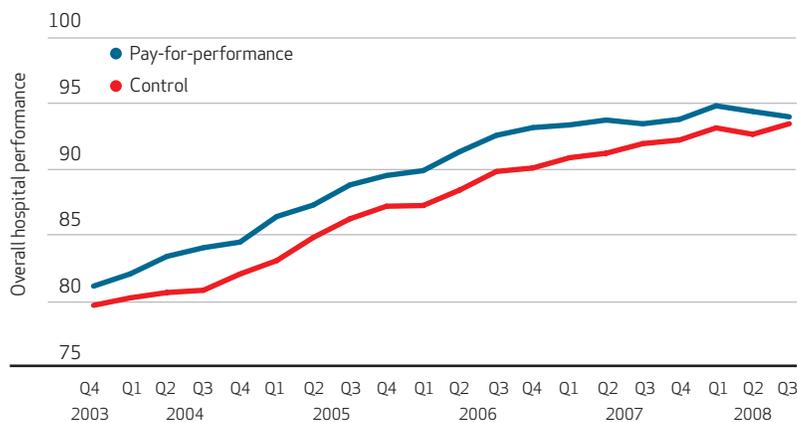
Similarly, Andrew M. Ryan at Cornell University and colleagues studied the first years of the Massachusetts Medicaid hospital pay-for-performance program, which offered financial incentives for improving care for pneumonia and prevention of surgical infections, and found no improvement in quality. Another study led by Steven D. Pearson of Massachusetts General Hospital compared quality performance among Massachusetts’ physician group practices during 2001–03 and found improvement in quality measures across all of the medical groups, regardless of whether or not pay-for-performance incentives were in place. The amount of improvement was consistent with what occurred nationally during the same time period.

Suzanne Felt-Lisk of Mathematica Policy Research conducted a study of seven Medicaid-focused health plans in California from 2002 to 2005, and found that paying financial bonuses to physicians for improving well-child care did not produce significant effects in the majority of participating health plans. The lack of success was attributed to particular characteristics of the Medicaid program, such as enrollees’ lack of transportation and limited staff capacity to do outreach.

Showing greater success, researchers at Dartmouth College and the National Bureau for Economic Research recently analyzed results of the Medicare Physician Group Practice Demonstration, a pilot project that ran from 2005 to 2010. In the demonstration, doctors

EXHIBIT 2

Average Overall Performance in Pay-for-Performance and Control Hospitals, Fiscal Years 2004–08



SOURCE Rachel M. Werner, Jonathan T. Kolstad, Elizabeth A. Stuart, and Daniel Polsky, “The Effect of Pay-for-Performance in Hospitals: Lessons for Quality Improvement,” *Health Affairs* 30, no. 4 (2011): 690–8. Data from Hospital Compare: survey of patients’ hospital experiences [internet], Department of Health and Human Services. **NOTES** Performance is averaged across the three conditions: acute myocardial infarction, heart failure, and pneumonia. The values shown are average composite performance scores.

1%

Hospital payment penalty

Starting October 1, 2012, the Centers for Medicare and Medicaid Services can reduce payments by 1 percent to hospitals whose readmission rates for patients with certain conditions exceed a particular target.

“Despite limited evidence of effectiveness, pay-for-performance remains popular among policy makers and public and private insurers.”

in 10 large physician group practices received bonuses if they achieved lower cost growth than local controls and met quality targets. The researchers found an improvement in quality but modest reduction in the growth of spending for most Medicare beneficiaries. Cost reductions were greatest for the 15 percent of patients who were dual eligibles, typically low-income people who qualify for both Medicaid and Medicare and who often have complex, chronic conditions.

PAYER-PROVIDER CONTROVERSY: Despite limited evidence of effectiveness, pay-for-performance remains popular among policy makers and public and private insurers as a tool for improving quality of care and containing health care costs.

Supporters of pay-for-performance point out that their primary goal has been measuring the quality of care and motivating providers to improve it. The element of lowering cost has been included only recently in many of these arrangements. Now, supporters say, measuring both quality and cost is important, in part to ensure that quality doesn't decline even as costs are lowered.

Some providers, however, have tended to be skeptical of pay-for-performance arrangements. Although they don't disagree with the need to focus on quality improvement, they are concerned that the underlying goal of pay-for-performance is cost containment at the expense of patient care. They recall, for example, the consumer backlash against managed care with its focus on restraining spending with little or no monitoring of quality.

Another issue for providers is the cost of adopting the health information technology needed for data collection and reporting. The American Academy of Family Physicians has stated that pay-for-performance incentives must be large enough to allow physicians to recoup their additional administrative costs as well as provide significant incentives for quality improvement.

Other professional societies are actively engaged in influencing the design of pay-for-performance programs and monitoring their implementation. The American Medical Association has developed principles for pay-for-performance programs emphasizing that provider participation should be voluntary; that physicians should be allowed to review, comment, and appeal performance data; and that programs should use new funding “for

positive incentives to physicians for their participation.”

SAFETY-NET PROVIDERS: Serious concerns have been raised about the impact of pay-for-performance approaches on poorer and disadvantaged populations. In particular, there are fears that these programs may exacerbate racial and ethnic disparities in health if providers avoid patients that are likely to lower their performance scores.

A study by Alyna Chien at Weill Cornell Medical College found that medical groups caring for patients in lower-income areas of California received lower pay-for-performance scores than others. The reasons were attributed to serving patients who had both language barriers as well as limited access to transportation, child care, or other resources.

Similarly, a study by Jha and colleagues of costs and quality in US hospitals found a group that consistently performed worse on both quality and cost metrics and that cares for proportionally greater numbers of elderly black and Medicaid patients than other institutions. Many of these hospitals also have low or zero margins. If they were to lose even 1 percent of Medicare reimbursement through the value-based purchasing program, the authors wrote, the impact would be severe, and care for the populations these institutions serve could be jeopardized.

Another analysis of Medicare data by Kaiser Health News showed that hospitals that treat large numbers of low-income patients will be hit especially hard from penalties for having overly high ratios of avoidable hospital readmissions. Safety-net hospitals argue that their higher readmission rates reflect their patients' poor access to physicians and medications. CMS argues, on the other hand, that many safety-net providers outperform hospitals that do not treat significant numbers of low-income patients. This premise is supported by a recent study by Yale researchers that found similar mortality and readmission rates between safety-net and non-safety-net hospitals.

WHAT'S NEXT?

Pay-for-performance programs are likely to expand across US health care in the near future, especially with implementation of the Affordable Care Act. But experience to date with pay-for-performance initiatives has

raised a number of questions that require more research and experimentation.

For example, how large do rewards need to be to produce desired changes? How often should rewards be distributed? How can improvements in performance become sustained over time? How can provider acceptance best be gained and maintained? What impact will these programs have on health systems that are weak financially or that serve greater proportions of racial and ethnic minorities?

As with any emerging reform tool, researchers say, experimentation with pay-for-perfor-

mance programs should include thoughtful monitoring and evaluation to identify design elements that positively affect outcomes. Evaluation of these programs should take into account variations in health care markets, such as in the supply of providers, and should include control or comparison groups so that the effects of pay-for-performance can be isolated from other factors.

Evaluations will also need to be conducted over sufficiently long time periods to identify any unintended consequences, such as long-term effects on vulnerable populations. ■

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