



Making the Best of Hospital Pay for Performance

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Over the past decade, “pay for performance” in health care has evolved from concept to policy with remarkable speed. In October 2012, U.S. acute care hospitals will begin to be paid for performance

under the Medicare Hospital Value-Based Purchasing (VBP) program.¹ Accumulating evidence, however, raises serious doubts about whether the program will improve value in health care. How did we get to this point, and what can be done to redirect the policy as VBP is rolled out nationally?

Pay for performance is grounded in an economic truism: money changes behavior. In the early days of pay for performance, this axiom



An audio interview
with Dr. Blustein
is available at NEJM.org

was largely tested by private payers in outpatient settings.

With limited activity on the inpatient side, the Centers for Medicare and Medicaid Services (CMS)

— historically an innovator in hospital payment — took the lead. In 2004, the agency began to pay U.S. hospitals for publicly reporting their performance on a set of measures of processes of care.

The Premier Hospital Quality Incentive Demonstration, a voluntary pay-for-performance program jointly implemented by CMS and Premier Inc. (a “performance-improvement alliance” of hospitals), was the next step. Early results appeared highly promising: an influential article revealed that participating hospitals had modestly higher rates of improvement in process-of-care measures than matched comparison hospitals for

each of the diagnoses for which incentives were provided (acute myocardial infarction, heart failure, and pneumonia) in the first 3 years of the program.² By then, pay for performance had passed the tipping point.³ In 2007, CMS delivered a report to Congress outlining a proposal for pay for performance in hospitals. Many key provisions of that report were adopted into the Affordable Care Act (ACA). Section 3001 of the ACA details how hospital performance will be measured under VBP and mandates an ambitious timeline for rolling out the program (see box).

As momentum was building on the policy front, researchers were looking more closely at hospital pay for performance. A second wave of studies of the first 3 years of the Premier Demonstration program raised doubts that it had in

Quality Measures to Be Used under Medicare's Hospital Value-Based Purchasing Program.

Clinical process

Acute myocardial infarction: fibrinolytic therapy received within 30 minutes of hospital arrival; primary percutaneous coronary intervention received within 90 minutes of hospital arrival
Heart failure: discharge instructions
Pneumonia: blood cultures performed in the emergency department before initial antibiotic received in hospital; initial antibiotic selection for community-acquired pneumonia in immunocompetent patients
Infections associated with health care: prophylactic antibiotic received within 1 hour before surgical incision; prophylactic antibiotic selection for surgical patients; prophylactic antibiotics discontinued within 24 hours after surgery end time; cardiac surgery patients with controlled 6 a.m. postoperative serum glucose levels
Surgery: surgery patients taking a beta-blocker before arrival who received a beta-blocker during the perioperative period; recommended venous thromboembolism prophylaxis ordered; appropriate venous thromboembolism prophylaxis received no more than 24 hours before surgery and up to 24 hours after surgery

Patient experience

Communication with nurses; communication with physicians; responsiveness of hospital staff; pain management; communication about medicines; hospital cleanliness and quietness; discharge instructions; overall rating of hospital

Patient mortality

Mortality at 30 days, acute myocardial infarction; mortality at 30 days, heart failure; mortality at 30 days, pneumonia

Hospital-acquired conditions

Foreign object retained after surgery; air embolism; blood incompatibility; pressure ulcer stages 3 and 4; falls and trauma (includes fracture, dislocation, intracranial injury, crushing injury, burn, electric shock); infections associated with vascular catheters; urinary tract infections associated with catheters; manifestations of poor glycemic control

Patient safety

Composite measure of complication and patient-safety indicators (pressure ulcer, iatrogenic pneumothorax, bloodstream infections related to central venous catheters, postoperative hip fracture, postoperative pulmonary embolism or deep vein thrombosis, postoperative wound dehiscence, and accidental puncture or laceration); mortality for selected medical conditions (composite)

Timeline for Implementation.*

Year	Measures to Be Used (Relative Weight)	Percentage of DRG Payments Withheld (Estimated Total Revenue Redistributed)
2013	Clinical process (70%) Patient experience (30%)	1.00% (\$850 million)
2014	Clinical process Patient experience Patient mortality Hospital-acquired conditions Patient safety	1.25% (\$1.09 billion)
2015	Same as FY 2014	1.50% (\$1.35 billion)
2016	Same as FY 2014	1.75% (\$1.63 billion)
2017	Same as FY 2014	2.00% (\$1.91 billion)

* The years listed are the fiscal years in which payments will be made (fiscal year [FY] 2013 begins in October 2012); the time windows for measuring performance vary with the measure set. For FY 2013 payments, performance was measured for 9 months beginning on July 1, 2011; for the FY 2015 mortality measures, performance will be measured for 18 months, also starting on July 1, 2011. CMS has indicated that it will propose an additional measure for FY2014 (Medicare spending per beneficiary); other measures will be specified in the (calendar year) 2012 Outpatient Payment System proposed rule. Relative weights for years after FY2013 have not yet been announced. The estimated total revenue that will be redistributed is based on the assumption of a 3% annual increase in total Medicare hospital diagnosis-related group (DRG) payments.

fact improved care.⁴ Even more discouraging were results from the second phase of the program, beginning in 2006, which introduced a new payment-incentive structure, bringing the program more in line with Medicare's evolving VBP plans. This second phase also brought an increase of nearly 50% in the total amount of incentives paid out. However, these changes did not catalyze additional quality improvement; under the new scheme, improvement relative to comparison hospitals actually declined.⁵ At about the same time, a hospital-based pay-for-performance program implemented by Medicaid in Massachusetts, with incentives approximately five times the size of those used in the Premier Demonstration program, also showed that pay for performance had no effect on quality.

In short, the early success of hospital pay for performance was not replicable. But each attempt at replication was implemented in a different economic environment, offered different levels of financial incentives, and measured performance differently. Variations in the "dose" of any of these elements could explain the differences in hospitals' responses to the payment method. It would be unfair to summarize our knowledge by saying that hospital pay for performance is ineffective: a simple thought experiment — for instance, assuming that hospitals would be paid \$100,000 for every patient with myocardial infarction who receives a beta-blocker — suggests that hospital pay for performance *could* improve quality, at least in the areas where incentives apply. A fairer statement would be that we do not have a model of a successful program, and we do not know what such a program would look like.

Nonetheless, Medicare will soon move forward with VBP. Many of the parameters that will influence the success of the program are “baked in” to law. The questions are, How can we learn as the program unfolds? What should be monitored? How much flexibility is afforded by the ACA? And how can the program be improved?

First, we must learn how hospitals learn. Although the effect of financial incentives on the behavior of individuals is well studied and understood, it is less clear how financial incentives change the behavior of complex organizations. For example, we know little about how information about financial incentives is processed in the “nervous system” of hospitals, how that knowledge is transmitted to the appropriate actors, or how actors mount effective responses. We are ignorant of the financial costs of responses to pay-for-performance incentives, such as hiring additional quality-monitoring staff. National hospital VBP offers an opportunity to better understand how payment incentives affect the complex behavior within hospitals and how improvement occurs. Hospital learning collaboratives may be the best way to disseminate successful practices. Research on the costs and effectiveness of pay for performance would be a natural focus for the new Patient-Centered Outcomes Research Institute.

Second, fiscal side effects will have to be monitored. As VBP progresses, the financial consequences will be substantial. Hospitals will earn financial bonuses on the basis of levels of performance and quality improvement relative to specified benchmarks, with up to 2% of their revenue from diagnosis-related group payments at risk. CMS has pledged

to monitor whether VBP leads to “changes in access to [care] and the quality of care furnished to beneficiaries, especially within vulnerable populations.” However, measurable effects on patient care are likely to emerge slowly. More immediate effects on hospitals’ bottom lines need to be carefully followed, particularly among safety-net hospitals, which operate on exceptionally small margins.

Third, improvements should be made quickly, when possible. Given the uncertainty about the likely impact of VBP, CMS will need to monitor program effects continuously. Although the ACA is quite prescriptive, there is some wiggle room. In its initial rule-making proposal, the agency expressed a preference for making minor program changes to VBP in a “subregulatory” fashion, without going through the lengthy public-notice-and-comment process. The hospital community opposed that approach, and the notion of a subregulatory process has been tabled for the time being. It should be reconsidered, or perhaps reformulated in a way that is acceptable to hospitals but that allows CMS to adjust nimbly.

To be sure, even if hospital VBP doesn’t improve care, it is unlikely to be as harmful as some have feared. Despite early concerns about unintended consequences, current evidence does not support claims that pay-for-performance programs adversely affect patients’ health, either through hospitals’ avoidance of sicker patients or through providers’ “teaching to the test” by focusing on the care that’s tied to incentives to the exclusion of other care. Moreover, although hospital pay-for-performance programs may not have directly affected the quality of care, these programs are part of a cocktail of interventions that

have raised awareness of quality problems and directed resources and attention to addressing them. A 2010 report from the Agency for Healthcare Research and Quality showed that the quality of acute care has been improving nationally, suggesting that efforts to measure, monitor, and make hospitals accountable for quality (including pay for performance) may be moving the needle in the right direction.

Like it or not, hospital pay for performance is here to stay. Other payment-system changes (such as bundled payments and accountable care organizations) will be tested in the near future, but VBP will be one of the first highly visible manifestations of health care reform to affect the lives of many practicing clinicians and the institutions in which they work. It will be critical to ensure that VBP is as good as it can be.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

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This article (10.1056/NEJMp1202563) was published on April 18, 2012, at NEJM.org.

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