

Pay-for-Performance and Accountability: Related Themes in Improving Health Care

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Value-based purchasing, or pay-for-performance, is a major emerging theme in U.S. health care. Forces enhancing adoption of pay-for-performance programs include continued increases in medical costs beyond overall economic growth, a body of evidence that the quality of health care provided to patients is not directly related to the volume of services received, increasing evidence to serve as a basis for the development of standards against which to measure clinical performance, and increasing acceptance by physician organizations and individual practitioners of the rationale underlying

these efforts. In this context, employers, government payers, and health plans are establishing a wide variety of pay-for-performance programs. This article reviews the critical design features of such efforts, describes the current types of programs on offer, and comments on the implications of this emerging movement for the future of health care in the United States.

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The recent surge of interest in value-based purchasing, or pay-for-performance, reflects a shift from preoccupation with the dramatic and continuous increases in health care costs to increasing concern about getting value commensurate with cost (1). When designed effectively, pay-for-performance targets all 3 measures of clinical performance: clinical quality, efficiency, and patient satisfaction. Most early initiatives to pay health care providers for providing evidence-based services, such as nominal payments aimed at enhancing immunization rates, were modest and narrowly focused. Over the past 5 years, efforts to improve quality of care through financial and other incentives have increased dramatically. More than 100 such programs currently exist. Reviews of the literature about early pay-for-performance programs indicate that the benefits are, at best, modest and strongly influenced by design features, although recent experience with greater financial incentives suggests a greater effect on performance (2–5).

When I started my career in the late 1970s as an academic internist and geriatrician, I was skeptical of pay-for-performance, feeling that standards of care could not accurately assess the real benefits of my care of my frail elderly patients with multiple impairments. I still feel that way today because despite the rapid growth of the evidence base, we continue to measure relatively simple aspects of the process of care rather than measuring outcomes. I also felt then that pay-for-performance was a thinly veiled effort to increase efficiency rather than quality. Subsequent experience as the leader of a large academic health science center and as chief executive officer of a major health insurer has led me to believe that pay-for-performance holds substantial potential for enhancing quality of care. Fueled by the emergence of increasingly good evidence and relentless pressure from government and private payers to provide value, I feel the time may come when a substantial portion of physician compensation in the United States will be pay-for-performance-driven. Although I feel a sense of urgency, I recognize that broad application of pay-for-performance will depend on more widespread adoption of the electronic medical record, where progress seems to be mov-

ing at a glacial pace despite the obvious advantage of universal agreement about its important role in improving the reporting of quality of care.

THE MEDICAL PROFESSION AND VALUE-BASED PURCHASING

The medical profession is making formal commitments to be accountable in response to the surge of interest in evidence-based medicine and concerns about overuse of health care services. These commitments provide a moral and professional rationale for physicians and physician organizations to support efforts to control costs, improve quality of care, and participate in pay-for-performance initiatives. The American Board of Internal Medicine Foundation, together with the American College of Physicians–American Society of Internal Medicine Foundation (now the American College of Physicians Foundation) and the European Federation of Internal Medicine, promulgated a physician charter on medical professionalism, including specific professional responsibilities and commitments. One commitment focuses on using better quality-of-care measures across the health system. A second commitment, relating to the just distribution of finite resources, states, “While meeting the needs of individual patients, physicians are required to provide health care that is based on the wise and cost-effective management of limited clinical resources” (6). Although these commitments are well aligned with the goals of pay-for-performance, they emanate from leaders of professional organizations and may not necessarily reflect the views of practicing physicians.

Nevertheless, the results of a 2004 poll of a sample of 400 randomly selected physicians (90% in private practice, 7% hospital based, 83% men, and 47% in primary care) suggest that practicing physicians do support efforts to control cost and quality through value-based purchasing. Seventy-one percent of physicians supported payments based on the quality of care they provide, and well over 60% thought that hospitals should also be paid on this basis. Almost 90% of physicians thought that the current

reimbursement system did not reward them for providing high-quality care, and 62% supported public access to information about the quality of care they provide. Not surprisingly, physicians also expressed some concerns about pay-for-performance, especially the difficulty of establishing standards and measuring quality and the possibility that standard setters may not place a high priority on patients' needs (7).

DESIGN OF VALUE-BASED PURCHASING INITIATIVES

The design considerations in developing pay-for-performance programs include the clinical setting; the patient population; the specific incentives; the targets of the reward and the amount of the reward; and, particularly, the standards of performance (8). In addition, reliable data are central to the success of pay-for-performance. From this perspective, progress depends on widespread adoption.

Clinical Practice

The greater the proportion of the practice that is influenced by the payer (for example, health plan, Medicare, or Medicaid) implementing a pay-for-performance initiative, the more incentive physicians have to respond to the initiative (9). The prevalent mode of payment in the practice is also critical. If the quality improvement target requires additional physician actions (for example, tests, prescriptions, or reports), the likelihood of effectiveness in a practice setting in which these services are paid for individually will be greater than in a capitated practice. Conversely, capitated practices with salaried physicians would more easily adapt approaches aimed at reducing overuse of services. The patient population could affect the likelihood of success. Access to health care varies depending on race and ethnicity. Disparities in access might influence the effectiveness of pay-for-performance initiatives in groups with limited access (10).

Target of the Incentive

Incentive programs often pay only for superior performance. This approach runs the risk of merely redistributing funds from lower-performing physicians to superior performers without changing performance. Improving the overall quality of care in the community requires approaches that reward improvements even though the resulting performance may not be superior. Rosenthal and colleagues (11) described a health plan initiative that generously rewarded the highest-performing groups even though their performance did not change from its pre-incentive level. Lower-performing groups that improved received very modest payments. This type of experience can quickly erode support for pay-for-performance efforts. Programs should reward the level of performance and sustained improvement (12).

Form of the Incentive

Incentives come in different forms. Selection of the most effective incentive is influenced by many factors, in-

cluding the magnitude of change that the pay-for-performance initiative requires to qualify for the reward. For instance, if the requirement for change is modest, a non-cash incentive, such as lessening administrative burdens, may be effective. Channeling patients to preferred providers provides financial benefit to physicians but does not increase the unit cost to the payer. Reputational incentives include making providers' process or outcome results available to patients. To date, public release of information has not significantly affected patient decision making about choosing a physician or health plan (8, 13).

Cash Incentives

An important issue for cash incentives, whether increased fees or bonuses, is the target of the payment. Payments are generally directed toward physicians, disease management entities, hospitals, or clinics. Because many initiatives relate to the performance of interdisciplinary clinical teams, especially for high-quality care for patients with chronic disease or those receiving complex treatment regimens, fair allocation of rewards across team members is important. Payers can reward patients for going to the best providers by lowering the amount they have to pay out-of-pocket.

How much should be paid? In a review of the U.S. experience, where most incentives are modest, the Agency for Healthcare Research and Quality failed to identify a consistent relationship "between the magnitude of the incentive and the response" (3). Most health plan efforts include financial incentives of less than 10% of physician income. The British National Health Service (NHS) has implemented a very substantial incentive for general practitioners, through which physicians can receive up to 25% of their income from quality-of-care-based incentives, a far greater commitment to performance-based payment than seen to date in the United States. Early results from this effort are discussed later in this article.

Development of Standards of Performance

To be acceptable to physicians, quality measures that will determine their rewards must be evidence-based; based on reliable, aggregated, observable performance information; transparent; and clinically important (14, 15). Many advocate a graded approach, starting by paying for merely reporting data rather than for specific levels of performance. In more advanced approaches, quality metrics include patient satisfaction, health care processes, adoption of computerized physician order entry in hospitals, and health outcomes, either alone or in combination.

Should metrics be simple or complex? Most current standards are simple. They state a basic clinical service that all patients with a certain condition should receive, such as prescription of β -blockers after myocardial infarction. Approximately 5% of patients are responsible for 50% of health care costs. They are typically complex. Therefore, we need standards to evaluate management of patients with chronic disease and multiple comorbid conditions. To

achieve this goal, we will need a much richer evidence base than is currently available. In addition, although most current standards are developed to evaluate primary care, specialty care accounts for a disproportionate share of health care costs. Standards must extend to specialty care and to complex patients with multisystem problems (15).

CURRENT VALUE-BASED PURCHASING INITIATIVES

Health Plans

In 2005, 84 health plans sponsored more than 100 value-based purchasing initiatives; among them were Medicare and employers, either alone or in collaborative groups. Although most initiatives are sponsored by a single health plan, 1 large cooperative effort under way in California includes 7 health plans, 215 medical groups, and 45 000 physicians (16). The incentives vary widely, including cash payments to physicians; channeling of patient referrals; lessening of administrative burdens; and special recognition efforts, such as special notations next to physicians' names in lists of network providers.

One approach is to selectively refer patients to "elite" networks of physicians who are chosen on the basis of quality and efficiency. In such programs, health plans often do not increase the payment per patient, but increased patient referrals can increase physician income because the income from these "extra" patients is mostly profit since the physician incurs few additional practice expenses to see such patients. Insurance premiums for such special network "products" are often lower than for the entire network despite the higher quality, because the patients who are treated by physicians in the select network often have shorter hospital stays, fewer complications, and fewer readmissions. The end result of lower cost for better clinical performance supports the long-sought-after business case for quality in health care (17). "Elite" networks that channel patients to preferred doctors as a reward for high quality probably will not be useful in the primary care setting because practitioners with the finest reputations are already deluged with patients.

Medicare

As the single largest payer for most physicians and hospitals treating adult patients, Medicare's pay-for-performance efforts will influence quality of care. The Centers for Medicare & Medicaid Services (CMS) has recently launched an array of projects focused on hospitals, physicians, physician groups, disease management, and chronic care improvement (18–20). Medicare requires hospitals to report certain data on quality-of-care initiatives as a condition for eligibility for some payments and provides some payments to support the data collection and reporting. Medicare has also begun a voluntary reporting program for physicians and has begun to directly reward higher quality and cost-effectiveness with cash payments. In addition, CMS is exploring rewards for nursing homes that provide high-quality long-term care.

Employers

Employers, alone or in coalitions, have implemented their own pay-for-performance plans that provide bonus payments to physicians and hospitals, presumably because they believe that quality and cost-effectiveness improvements in employee care are in the employers' best interests. For outpatient activities, the most prominent employer program is the "Bridges to Excellence" program, a 3-component national ambulatory quality improvement program with a focus on diabetes, cardiac care, and physician office management (21). Physicians who demonstrate that they provide high-quality care for patients with diabetes, as measured by the criteria of the National Committee on Quality Assurance and American Diabetes Association, can receive \$80 per year per patient in bonus payments. The most prominent inpatient employer-sponsored program is the Leapfrog Group, an innovative coalition of employers committed to improving quality of care (22, 23). In Leapfrog's initial efforts implemented by health plans, purchasers, or coalitions in many areas across the United States, employers provided hospitals with additional payments for implementing the infrastructure for improving quality, such as computerized physician order entry and staffing intensive care units with board-certified intensivists.

Collaborative Efforts

The Human Resources Policy Association (HRPA) brings together approximately 200 human resource officers from major corporations to develop affordable health care solutions, provide for direct purchasing of pharmaceuticals, and foster regional health care quality reforms (24). The HRPA uses measurement sets that rely on the Leapfrog approaches for hospitals and the Bridges to Excellence efforts in the ambulatory setting.

Two recent collaborations of stakeholders deserve special attention because they are national and have the potential to induce substantial changes. They focus on developing refined national provider performance measures and aggregating nonfinancial claims data (for example, medication use, procedures, and diagnoses) to support application of the performance metrics. Combined data sets, aggregated from many payers, permit a more robust evaluation of a provider's experience or practice than can be obtained from just 1 payer. Collaborative efforts include Care Focused Purchasing, a joint effort of 30 major employers working with a large group of major health plans, and the Ambulatory Quality Alliance, which is a coalition of stakeholder groups that includes leading physician organizations, major corporations, health plans, consumer organizations, and CMS (25, 26).

Review of current pay-for-performance programs reveals 4 key trends. First, health plan efforts are heterogeneous, seemingly in an exploratory phase as plans seek the most effective strategies to reward quality. Second, Medicare, the largest single payer, has embraced the concept of pay-for-performance and is experimenting with ways to re-

ward quality. Third, employers, very powerful stakeholders, have taken a prominent role. The final theme is collaboration among different stakeholders. The counterpoint to this gathering momentum is the slow progress toward universal adoption of the electronic health record. We are far behind smaller countries in which universal health insurance may be a unifying force.

PAY-FOR-PERFORMANCE IN THE UNITED KINGDOM

In the spring of 2004, the NHS of the United Kingdom launched a major pay-for-performance initiative supported by an expansion of the NHS budget. A general practitioner's income can increase nearly 25% according to clinical performance relative to quality indicators for chronic disease management, patient satisfaction, and organization of care. As recently reported (4, 5), in the first year of this ambitious program, physicians achieved higher-than-expected quality scores and earned bonuses averaging more than \$40 000 U.S. dollars. This unexpected outcome, which has contributed greatly to the current NHS operating deficit, shows the process of substantial financial incentives.

The strong clinical performance may indicate improved performance in response to large financial incentives, or it may mean that the NHS set the targets too low. In addition, some physicians may have exploited the opportunity to exclude certain patients from evaluation, which makes perfect clinical sense (that is, one should not punish a physician for failing to treat high serum cholesterol levels in a patient with a terminal illness) but is also an opportunity to "game" the system. In fact, some practices did exclude many patients. The U.K. experiment requires further study, from which the United States clearly has much to learn.

HELPING PHYSICIANS RISE TO THE CHALLENGE

New Money or Old?

Physicians have many concerns about pay-for-performance. Foremost are who will establish the standards for quality measurement that have the potential to substantially reduce their income. They often call for "new money" to implement pay-for-performance. However, as seen recently in the United Kingdom, paying higher-performing physicians at historic rates will increase costs, an outcome that employers, government sponsors, and other payers in the United States will not support. A more likely scenario is that over time higher-performing physicians and those demonstrating sustained improvement will receive higher pay, more volume, or other rewards, whereas lower-performing physicians will receive less of each.

Physician Education

Advocates of pay-for-performance believe that physicians can improve their performance. To do so, many will need to acquire additional knowledge and skills. The

record shows that physicians who have been in practice for a long time have worse average scores on various measures of quality; they may be apt targets for educational initiatives (27).

This need for learning presents a remarkable opportunity for medical schools, postgraduate training programs, continuing medical education credit-granting programs, medical and specialty societies, and certifying boards. The recent trend toward requiring performance assessment to maintain one's specialty board certification might serve as a basis for certifying boards or specialty societies to collect the performance measures that pay-for-performance programs would use. The utility of these professional databases to serve these 2 purposes may be limited because health plans require data on current performance and some certification programs measure performance at 10-year intervals. In fact, performance data may flow to the certification programs, which will reduce reluctant collection burdens for physicians.

What Will the System Look Like?

Although the movement to reward performance is still in an exploratory phase, recent experience provides clues to future directions. Consensus will probably develop around program designs that prove successful. Tangible progress toward universal access to the electronic medical record is likely. Growing collaboration between groups of health plans and across different groups of stakeholders will facilitate development of large observational databases and more robust understanding of practice patterns, paving the way for a true "learning health system." These large data sets should provide the evidence to support increasingly sophisticated practice standards that go beyond measuring simple health care processes (such as prescriptions for β -blockers after myocardial infarction) and tackle the management of complex clinical situations. At the same time, patients will know more and more about the costs and quality of the care available to them. Physicians will face enormous pressure to learn and to change practice behavior.

Professional organization and certifying boards must seize the opportunities to lead or watch from the sideline as the influence of the profession wanes. One can envision establishment of a partnership between certifying boards, continuing medical education organizations, health plans, CMS, employers, and other relevant parties to create a common channel for the collection and reporting of clinical performance information. In addition to a central role in the assurance of quality of care for society, participation in shared data pooling would also position professional organizations to influence the development of the next generation of clinical performance standards.

CONCLUSION

Is pay-for-performance here to stay or is it, as some believe, a passing fad, soon to be replaced by the next big idea? Only time will tell, but for now it seems to be a

useful strategy to pursue. Some skeptics fear that pay-for-performance standards will morph into the ultimate “clinical cookbook” that restricts clinical judgment as the recipes improve. I think that this outcome is unlikely. Although access to almost real-time evaluations of clinical performance should reduce undesirable variability across physicians and hospitals, doctors will probably still vary substantially in their practice patterns. Hospitals will continue to vary so much that hardly two are alike. Although evidence-based standards are important, they are only a small part of the practice of medicine. Very good performance against measures of quality of care will become a necessary but not sufficient condition for success in clinical practice. It is hoped that the payment system will learn to reward the personal qualities that patients continue to seek in their physicians.

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