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# Pay-for-Performance

## Will the Latest Payment Trend Improve Care?

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**P**AY-FOR-PERFORMANCE PROGRAMS ARE NOW FIRMLY EN-  
sconced in the payment systems of US public and private insurers across the spectrum. More than half of commercial health maintenance organizations are using pay-for-performance, and recent legislation requires Centers for Medicare & Medicaid Services (CMS) to adopt this approach for Medicare.<sup>1</sup> As commercial programs have evolved during the last 5 years, the categories of providers (clinicians, hospitals, and other health care facilities), numbers of measures, and dollar amounts at risk have increased. In addition, acceptance of performance measurement among physicians and organized medicine has broadened, with the American Medical Association committing to the US Congress in February 2006 that it would develop more than 100 performance measures by the end of 2006.<sup>2</sup>

To date, widespread experimentation has yielded important lessons and highlighted critical challenges to paying for performance. Several recently published evaluations have demonstrated both the potential of pay-for-performance and the need for careful design of programs to ensure their effectiveness.<sup>3,4</sup> Despite purchasers' enthusiasm for pay-for-performance, it has become clear that it should not be a foregone conclusion that these programs will benefit patients or even significantly assist providers who want to improve care.<sup>4,5</sup>

While recognizing the shortcomings of current pay-for-performance programs, it is critical to reaffirm what most physicians and health care purchasers alike believe: the current payment system thwarts high-quality care and needs to be reformed. Furthermore, the basic intent of pay-for-performance—to encourage and assist providers in offering the most clinically appropriate care—would be a posi-

tive step from the current payment system. Nonetheless, there are many details about how pay-for-performance would actually be implemented that could mitigate or even reverse some of its good intent.

Our objective is to review dimensions of pay-for-performance programs that economic theory or available data suggest would be important determinants of their influence. With CMS poised to enter the fray and many commercial payers evaluating, expanding, and updating their first-generation pay-for-performance programs, the time is right to examine critically the various approaches to pay-for-performance.

### Five Key Design Elements of Pay-for-Performance

Purchasers must make many decisions when implementing pay-for-performance programs.<sup>6</sup> Based on our experience studying incentive programs,<sup>4,5,7-9</sup> 5 aspects of program design that are likely to be most consequential have been identified. These 5 dimensions govern the types of provider behavior being influenced and the degree to which incentives are felt by clinicians. The TABLE presents the options available for each of these dimensions and includes examples of empirical or theoretical literature addressing the rationale for and against each option, as well as what is known about currently operating pay-for-performance programs. In discussing targets of pay-for-performance, the term *provider* is used to refer collectively to physicians, hospitals, and any other clinician or clinical entity that can bill for services.

**Pay-for-Performance as Individual vs Group Motivator.** In markets in which there are larger medical groups, phy-

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sician-hospital organizations, and independent practice associations, there will be a question of whether performance measurement and payment should be focused on individual physicians or at the organization level. Actual payments go to the contracting organizations, but contracts can include stipulations that performance payments be passed on to individual physicians. However, there are important tensions between holding individual physicians accountable for their direct impact on patient care and the notion that quality deficiencies often reflect system problems and therefore can be best addressed by the group collectively. In practice, groups often pool the risk associated with capitation or pay-for-performance contracts<sup>10,16</sup> and enforce desired behavior by way of management systems (eg, decision support, internal utilization review).

It is likely, however, that a mixed approach is optimal. That is, for performance issues that can be improved most efficiently through group action (eg, by adding an information system that improves prescribing accuracy for all providers), incentives should be directed toward the group. For behaviors under the individual physician's control, such as counseling about smoking cessation and documentation, incentives may be most effective when targeted at individu-

als. Most groups will have multiple performance goals and these will change over time, so a varying mix of incentive approaches, combined with other management techniques such as feedback, will probably be optimal.

**Paying the Right Amount.** Some pay-for-performance schemes have paid as little as \$2 per patient and had an impact, while others offering bonuses of up to \$10 000 to a practice had no effect.<sup>17,18</sup> No specific dollar amount or percentage will be the right amount for every circumstance. Economic theory suggests that the reward should be commensurate with the incremental cost of the quality improvement required, including the lost revenue that the provider could generate in other activities, such as seeing more patients. In addition, although most current pay-for-performance programs offer only one kind of payment, such as a bonus for achieving 90% influenza vaccination rates, it will be more effective to vary the payment approach according to the stream of costs that adherence creates.

For example, it is reasonable to pay for each additional Pap smear, because each Pap smear costs the clinician time, but the equipment to perform the smear is inexpensive. On the other hand, with computerized order entry, writing the first order requires investing in an entire system, but the cost

**Table.** Key Elements of Pay-for-Performance Programs

Dimension	Major Issues	What Programs Typically Look Like	Selected Evidence or Theory
Individual vs group incentives	Advantages of targeting individual providers: clearly identifies accountability, natural unit of contracting/payment for many providers and health plans Advantages of targeting groups: bigger sample sizes, groups can share risk, invest in systems, tailor quality improvement to fit local needs	14% of physician pay-for-performance programs focus on individual physicians alone; 25% target both individual physicians and groups; 61% target groups alone <sup>1</sup>	Economic theory suggests that medical groups may serve an important risk-sharing function, but group incentives to perform are weaker for individuals <sup>10</sup> Sample sizes make performance measurement more difficult for individual physicians than for groups <sup>11</sup> A failure of systems rather than individual motivation is widely seen to be crux of quality problems <sup>12</sup>
Paying the right amount	Considerations: cost of improvement, shared savings, market share of sponsor	Maximum performance bonuses averaged 9% for physicians in 2005 <sup>13</sup>	Economic theory suggests that the recipient of an incentive must be compensated for the incremental net costs of undertaking the desired action <sup>14</sup>
Selecting high-impact performance measures	Considerations: coordination across payers Focus: clinical quality: structure (particularly information technology), process or outcomes and underuse, misuse, or overuse; patient satisfaction/experience; national vs locally developed measures	91% of programs target clinical quality measures; 50% target cost efficiency; 42% target information technology; 37% include patient satisfaction measures <sup>13</sup> (data on national vs locally developed measures unavailable)	Regardless of which measures are chosen, coordination of measure selection within a market can greatly improve the effectiveness of pay-for-performance in a setting with many payers <sup>15</sup>
Making payment reward all high-quality care	Options: single or multiple thresholds, reward significant improvement, reward for each patient that receives recommended care	70% of pay-for-performance programs use thresholds; 25% pay for improvement <sup>1</sup>	Economic theory suggests that physicians will respond to the incremental payment associated with undertaking each task An all-or-nothing bonus means that there is zero incremental payment for improvements that fall short of the threshold and for improvements beyond the threshold <sup>14</sup>
Prioritizing quality improvement for underserved populations	Options: Directly or indirectly address higher cost for performance improvements for traditionally underserved populations; pay patients to improve their motivation to follow treatment recommendations; invest in system improvements, cultural competence	No statistics available to date, but emerging area of interest Example: Blue Cross/Blue Shield of Massachusetts has integrated cultural competency training into its physician pay-for-performance programs	If it is truly more difficult to improve the care for some populations, this implies higher costs that must be factored into the magnitude of reward

of subsequent orders is quite low. Thus, providers may perceive the need for large, one-time payments to support the adoption of substantial, new information technology (IT), perhaps with smaller subsequent annual payments that reflect the cost of operating the system. Payers, however, would unlikely agree to such payments without a mechanism for ensuring a return on their investment. One possible compromise would be for a payer to award a substantial subsidy upfront for IT investment with a performance contingency that required, for example, certain capabilities or quality performance within 2 years of the subsidy payment. If the contingency was not met, the payer could reduce payments (or withhold scheduled increases) to offset part of or the entire subsidy. Although such penalties appear to be uncommon in pay-for-performance for providers, performance guarantees with associated penalties have been a frequent feature of health plan contracts with employers.<sup>19</sup>

Some payers have approached the decision about the optimal magnitude of performance payments in light of the benefit of the targeted activity. For example, the bonus to physicians for excellence in diabetes care under the Bridges to Excellence program was determined based on actuarial estimates of the savings to employers from improved care processes. Although a “shared savings” approach to setting payment rewards has some intuitive appeal, it does not explicitly account for the cost of meeting performance targets. Therefore, payments calculated in this manner may not be sufficient to offset the costs of improvement or may not be the most efficient way to achieve the goal of improving care.

**Selecting High-Impact Performance Measures.** The introduction of performance incentives likely will influence which areas of practice are targeted for quality improvement efforts. Therefore, providers should seek a central role in deciding what is measured. Furthermore, appropriate measurement of clinical performance is not always intuitive<sup>20,21</sup>; therefore, physicians also need technical input to determine precisely how performance is assessed. In Washington state, for example, the Premera Blue Cross health plan worked closely with the major clinics that provide care to its enrollees to develop performance reporting on both cost and quality measures, and then to use the same performance data to calculate financial rewards. Similarly, the Maine Health Management Coalition organized a 14-member physician advisory committee to help select and specify quality measures to be used in its primary care physician report card and pay-for-performance program.

In terms of measuring quality of care, the trend so far has been to use measures that are widely available and nationally uniform because they are required for accreditation (eg, in outpatient care, this means Health Plan Employer Data and Information Set [HEDIS] measures; in inpatient care, Joint Commission on Accreditation of Healthcare Organizations [JCAHO] core measures). However, very few of these

measures are now in existence; for instance, currently required JCAHO core measures address only myocardial infarction, pneumonia, heart failure, and maternity care, with surgical infection prophylaxis measures under consideration. Obviously, this excludes the majority of clinical activity in hospitals. Perhaps as a result of this paucity of nationally accepted measures, most current pay-for-performance projects include locally selected measures, usually developed with input from local clinicians.<sup>22</sup>

Another major issue will be the balance between the clinical validity of measures (eg, by abstracting more data for severity adjustment of outcomes) and the cost of data collection. In general, the more one tries to adjust for differences among providers in patient populations or to obtain specific details about the care delivered, the greater the data burden and cost. The first decision is whether to use claims data or to collect additional data from charts. In the absence of physician input, many health plans have used claims data to measure and report provider quality to beneficiaries, despite physicians' conviction that this data source is not adequate for measuring clinical performance.<sup>8</sup> Accordingly, there is a need for physicians to address these issues directly and find practical, compromise solutions in collaboration with local purchasers.

**Other Measures.** Most purchasers are also interested in measuring aspects of performance other than quality, particularly efficiency and the adoption of office systems improvements, so most extant pay-for-performance initiatives include one or both of these.<sup>13</sup> However, the science behind these measures is much weaker than that supporting most clinical quality measures. The measures in these areas could influence providers' business and administrative processes. For instance, 42% of pay-for-performance programs in 2005 incorporated specific IT requirements.<sup>13</sup> Clinical medicine today is so information intensive that these programs could significantly shape future clinical encounters and the functioning of office staff.

**Making Payment Reward All High-Quality Care.** First-generation pay-for-performance programs have largely been designed to identify and reward top performers, by doing so directly (eg, bonuses are paid only to hospitals that perform in the top quartile for a measure), by allowing providers to voluntarily self-select into the program, or by setting and rewarding standards of performance that are achievable only by a few.<sup>13</sup> Many current pay-for-performance programs offer rewards for high relative performance (eg, being among the top 10% of physicians) rather than absolute performance. Rewarding only the top providers creates competition and can stretch a small bonus pool. On the other hand, competition may limit collaboration and sharing of best practices and may create or sustain quality gaps between high- and low-performing providers. Furthermore, this “tournament” approach introduces uncertainty—because a physician's bonus depends not only on his or her performance but also on that of the rest of the network. If they are uncertain about how much

additional revenue they can get, providers may be unwilling or unable to make investments in quality improvement.<sup>5,7</sup>

It is understandable that health plans and other payers have generally initiated pay-for-performance with an approach that rewards the leading providers in the community. To be a more effective lever for change, however, pay-for-performance programs should be recast from a program that rewards “top quality” providers to one that rewards high-value care, provided by anyone.<sup>4</sup> Payers could do this by paying all providers an additional fee for each appropriately managed patient or for each recommended service. With this approach, every provider has an incentive to deliver the best care to each patient seen.

For example, the Hudson Health Plan, a prepaid health services plan in New York state that serves 61 454 enrollees in the Medicaid and State Children’s Health Insurance programs, has implemented a diabetes quality pay-for-performance program in which primary care practices are eligible to receive up to \$300 per patient. Practices receive incremental dollar amounts for each of 12 process and intermediate outcome measures calculated on a patient-by-patient basis. For example, primary care practices will be paid \$15 per patient for patients with diabetes who receive an annual glycated hemoglobin (HbA<sub>1c</sub>) test and \$35 for each patient whose HbA<sub>1c</sub> level is below 7%. By moving away from a threshold approach toward one in which every physician has an incentive to provide high-quality care for the next patient to enter the clinic, pay-for-performance programs stand a better chance of improving care for all patients.

**Prioritizing Quality Improvement for Underserved Populations.** Because reducing disparities in health and health care quality is a national priority,<sup>23</sup> this issue deserves explicit attention in the design of pay-for-performance. One approach could be to offer larger incremental payments for providing high-quality care to populations that are disadvantaged or more costly to treat effectively. One argument for higher payments is that the costs of improving care will be greater for some providers because of their patients’ geographic, linguistic, educational, financial, and other barriers. Alternatively, capital grants, technical assistance, or special training (eg, in cultural competence) could be provided to hospitals and physicians who treat disadvantaged patients under pay-for-performance contracts. If low patient adherence is a major barrier to quality improvement in some populations, a case may be made for offering patients a parallel incentive or assistance programs. Health plans and large employers can and do offer patients cash awards or gifts for healthy behavior, nurse help lines, case- and disease-management, and educational materials, and these programs could be integrated with pay-for-performance to reduce the barriers to high provider performance.<sup>24</sup>

### A Window of Opportunity for Reform

The current enthusiasm for pay-for-performance could reasonably be dismissed as the latest health care fad, but it may

also represent a rare opportunity for physicians and payers to engage cooperatively in meaningful reform of an arcane payment system that for decades has held back efforts to improve care.<sup>12</sup> Although most pay-for-performance programs currently fall short of such lofty goals, we highlight several key ways to increase the fidelity of payment incentives to the goal of improving care for all patients. The public discourse on the use of incentives need not be limited to direct payment issues, because many pay-for-performance programs have also involved other approaches to providing support for clinical improvement. These have included public reporting of performance or “honor roll” programs, grants or in-kind support from payers to community quality improvement initiatives, and administrative simplification programs.<sup>25</sup> The exact design of pay-for-performance and its admixture with these other initiatives is likely to be a local decision and we cannot offer a single best prescription. Rather, the key is for providers, purchasers, and policy makers to understand both the potential benefits and the limitations of pay-for-performance and to consider how it can best be designed to improve care for patients.

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# Responding to the Global HIV/AIDS Crisis

## A Peace Corps for Health

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**H**IV DISEASE IS ESSENTIALLY THE BLACK DEATH OF the 21st century, killing on a massive scale and threatening to cripple economies and topple governments. However, the continued spread of the HIV epidemic and the new availability of lifesaving antiretroviral drugs have triggered an extraordinary response by governments, international organizations, philanthropies, pharmaceutical companies, religious organizations, and individuals. Campaigning against HIV/AIDS has no precedent in the history of medicine. Smallpox was eliminated by a globally coordinated strategy that required a single patient encounter to deliver the vaccine. In contrast, the directly observed therapy strategy at the core of modern tuberculosis treatment necessitates daily patient contact over much of the treatment course and, therefore, a much larger health workforce. Treating AIDS requires the daily delivery of medications as well as the clinical management of patients—for the rest of their lives. Antiretroviral medications can help control disease, but do not cure it. More problematic yet, stopping treatment once started promotes the emergence of resistant strains of the virus, making half-way programs hazardous to public health. The sheer volume of health workers needed to tackle HIV disease—and the health systems to support their work—is off the scale of any previous public health campaign.

This challenge is compounded by the impoverished nature of the health systems in many countries where HIV/AIDS is rampant and, in particular, by the critical shortage of physicians, nurses, and other health workers in these nations. The 2006 *World Health Report* from the World Health Organization<sup>1</sup> focuses the issue. Sub-Saharan Africa with 11% of the world's population has 24% of the world's burden of disease and more than 60% of the world's HIV/AIDS cases, but has only 3% of the world's health workforce.<sup>2</sup> There is 1 physician for every 390 individuals in the United States compared with 1 for every 33 000 in Mozambique; 1 nurse

for every 107 individuals in the United States, but only 1 for every 2700 in Tanzania. There are 24 pharmacists in Angola, a country of 12 million people.<sup>1</sup>

There can be no meaningful response to HIV/AIDS without sufficient health workers to plan, implement, and sustain the effort. Educating and retaining an adequate number of health workers is ultimately a nation-by-nation challenge. But the severity of the human resource gap and the urgency of the epidemic have focused global attention, and international organizations, donor governments, and private philanthropies are making investments in workforce scale-up strategies through programs such as the World Health Organization's Treat, Train and Retain initiative.<sup>3</sup>

What role is the United States playing in providing health personnel to help respond to the global HIV/AIDS epidemic? A relatively small number of US health professionals are currently in developing countries treating patients with HIV/AIDS. Some clinicians volunteer with faith-based or secular nongovernmental organizations (NGOs.) A few universities and corporations support health personnel in high prevalence HIV/AIDS countries. The government sends small numbers of physicians through the Centers for Disease Control and Prevention and United States Agency for International Development projects. Peace Corps sponsorship is limited to AIDS education initiatives. The principal US program to address HIV disease globally, the \$15 billion President's Emergency Plan for AIDS Relief (PEPFAR),<sup>4</sup> has done little to date to send US physicians and nurses abroad.

This modest level of mobilization is in sharp contrast to the clear interest among young Americans in medicine, nursing, and public health in taking on the world's toughest health problems. In 2006, 27.2% of graduating US medical students had worked abroad—double the number of a decade

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