



Perspective

Building a Bridge from Fragmentation to Accountability — The Prometheus Payment Model

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In the current debate over health care reform, many observers are proposing new delivery structures to move U.S. health care away from fragmentation, poor performance, and dysfunction

toward accountability for high-value care. Ideally, these new structures would promote clear accountability for both improving quality and controlling costs and would encourage health care professionals to organize themselves into teams working on behalf of patients. For such structures to be sustainable, however, the payment system must reward professionals for the quality and efficiency of services, rather than the quantity.

Our fee-for-service payment schemes have contributed to, if not largely created, the current fragmentation. Fee-for-service payments create incentives to pro-

vide high volume rather than high value — more, not better, care. So what kinds of payment could promote and sustain high-value care and motivate the development of accountable care organizations? Most experts agree that some sort of bundled, episode-based payment would help to move the system in the right direction. Our own approach, the Prometheus Payment model, for instance, bundles services and provides a budget with three components: evidence-informed base payment with patient-specific severity adjustments and an allowance for potentially avoidable complications (see box, “The Pro-

metheus Model”).^{1,2} The model has been developed and evaluated through several small pilot projects, which offer some lessons about the ability of episode-based payment to improve cost and quality within the current fee-for-service system. This kind of payment aims to foster outcomes-focused collaboration among otherwise unaffiliated providers and offers a bridge from our fragmented system to a more integrated, accountable one.

The model encourages two behaviors that fee for service discourages: collaboration of physicians, hospitals, and other providers involved in a patient’s care; and active efforts to reduce avoidable complications of care (and the costs associated with them). It accomplishes these goals by paying for all the care a patient needs over the course of a defined clin-

The Prometheus Model

Developed in 2006, the Prometheus Payment model now has three pilot programs in operation, supported by the Robert Wood Johnson Foundation. The model attempts to go beyond pay-for-performance approaches to pay for individual, patient-centered treatment plans that reward providers fairly for coordinating and providing high-quality and efficient care. Prometheus packages payment around a comprehensive episode of medical care that covers all patient services related to a single illness or condition. Decisions about which services will be covered for a given type of episode are made according to commonly accepted clinical guidelines or expert opinions that outline the tested, medically accepted best method for treating the condition from the beginning of an episode to the end. The prices of all included treatments are tallied to generate an “evidence-informed case rate” (ECR), which becomes a patient-specific budget for the entire care episode. ECRs include all the covered services related to the care of a single condition — services provided by everyone who would typically be involved (hospital, physicians, laboratory, pharmacy, rehabilitation facility, and so forth). The ECR is adjusted for the severity and complexity of the individual patient’s condition, and it incorporates an allowance for a portion of the current costs associated with potentially avoidable complications.

ical episode or a set period of management of a chronic condition, rather than paying for discrete visits, discharges, or procedures.

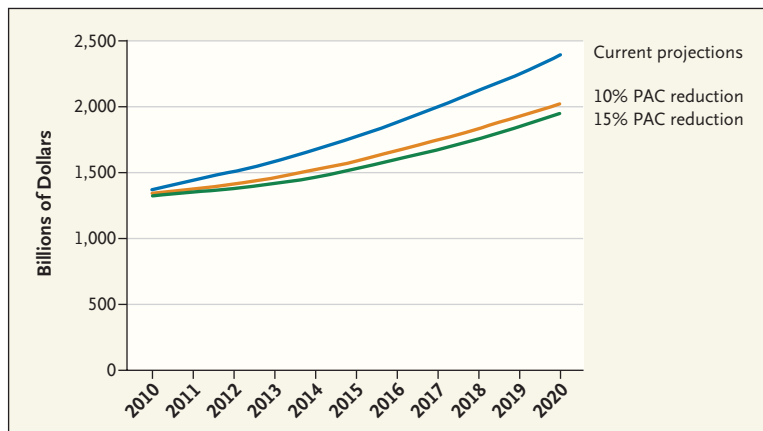
When incentives are used to drive changes in behavior, it is important that people and organizations are held accountable only for the variables that are actually under their control.³ That’s why, in designing the Prometheus model, we decided to focus on the potentially avoidable costs of patient care. We separated the costs attributable to patient-related factors from those attributable to providers’ actions. These latter costs are critically important in terms of accountability. In Prometheus, these potentially avoidable costs are called PACs and are recognized as the result of “care defects” — problems necessitating technical care that are under the professionals’ control and that, with the best professional standards, could have been avoided. PACs might include the cost of hospitalization of a patient with uncontrolled diabetes or the re-admission for a wound infection of a patient who had recently been

discharged after cardiac bypass surgery.

The opportunities for improving quality while reducing costs are substantial, reaching far beyond the well-publicized problem of avoidable readmissions. Our analyses of several national and regional data sets, in addition to our pilot work, show that PACs account for 22% of all private-sector health care expenditures in the United States.^{4,5} The data show that PACs can account for as much as 80% of all dollars

spent for conditions such as congestive heart failure that require intensive management and that there are significant regional variations in PACs. On the basis of our current findings, we project that even a modest reduction in PACs from one year to the next would have a considerable effect on the private sector’s portion of health care spending over the next 10 years (see graph). If such results were replicated in a Medicare population, the potential savings would double, reducing the country’s health care bill by more than \$700 billion over 10 years.

Unlike the current payment system, Prometheus provides larger profit margins for providers who can eliminate these complications, since they keep any unused PAC allowance — they profit by delivering optimal care, not a greater volume of care. Prometheus also avoids some of the classic pitfalls of capitation. Capitation has the unfortunate effect of transferring essentially all risk (including insurance risk) to providers and then encouraging them to pursue undifferentiated reduc-



Projected Private-Sector National Health Expenditures under Current Assumptions and If Potentially Avoidable Costs Were Reduced by Either 10% or 15% Per Year.

Data are from the Department of Health and Human Services 2009 and our own analysis. PAC denotes potentially avoidable cost.

Prometheus in Practice

A 63-year-old white man with chest pain and a history of unstable angina is admitted to a teaching hospital. The patient has hypertension and diabetes. An electrocardiogram reveals ST-segment elevation in the lateral leads. The man is taken to the cardiac catheterization laboratory, where coronary angiography reveals severe triple-vessel disease as well as 60% stenosis of the left main coronary artery. A left ventriculogram shows mitral regurgitation (grade 2 to 3) with papillary muscle dysfunction. The patient is then taken urgently to the operating room, where he receives two venous grafts and a left-internal-thoracic-artery graft. In addition, a mitral-valve reconstruction procedure is performed to correct the mitral regurgitation. The surgery is a success, and the patient returns to the intensive care unit in stable condition. However, his blood sugar is out of control, and he requires an insulin drip. His stay in the intensive care unit is prolonged by 2 days, and he must stay another day in the step-down unit. He is discharged 8 days after surgery in stable condition. One week after discharge, he is readmitted for a wound infection in his leg from the vein harvest site. He requires wound débridement and a course of antibiotics.

Under fee-for-service payment, the hospital would receive \$47,500 for the bypass surgery, and the surgeon would receive \$15,000 for performing the procedure. The extended hospital stay that was necessitated by the uncontrolled diabetes would result in an additional \$12,000 for the hospital and \$2,000 for the physician, and the readmission costs would total \$25,000, for a grand total of \$101,500.

Under Prometheus, the case-payment rate for this patient would include a severity-adjusted budget for typical costs of \$61,000 for the hospital and \$13,000 for the physician. The severity-adjusted allowance for PACs would be \$15,300, for a total budget of \$89,300. Had the readmission been prevented, the hospital and physician would effectively have earned a bonus of \$12,800 (\$101,500 – \$25,000 = \$76,500, which is \$12,800 less than the Prometheus budget).

tions in services in order to maximize financial gain. Prometheus mitigates those capitation problems — in part because the occurrence of a new case simply triggers a new patient-specific, severity-adjusted case rate and in part because typical costs and PACs are tracked and accounted for separately and, for now, opportunities for increasing financial gain are limited to decreases in PACs.

Clinical integration may be one way for providers to succeed under Prometheus, but it's not the only way. In fact, for most of the delivery system, the changes that are required to achieve full integration are neither feasible nor desired by many potential participants. Though there may be minimal organizational requirements for managing patient care in ways that minimize PACs, it is the act of collaboration, not a particular form of organization, that Pro-

metheus attempts to promote.

One lesson from our pilots is that hospital-centric provider organizations can expect increased internal tension when they implement an episode-of-care payment system. Prometheus does provide a sort of bonus to the hospital and physicians for working together to avoid readmission (see box, "Prometheus in Practice"). However, physician groups that are paid under the model for managing chronic conditions have substantial opportunities to increase the profits that come from avoiding expensive hospitalizations. This incentive can highlight potential conflicts between the financial interests of physicians and those of hospitals and cause us to question the proposition that hospital-centric provider organizations will deliver the best results for the country.

Prometheus does not require that a single integrated organi-

zation accept payment for an entire episode of care; we recognize that unrelated providers often overtly or tacitly comanage a patient's care. A limitation of many episode-payment programs is their reliance on prospective payment, which forces the payer to find organizations that will accept the global fee. The Prometheus model, by contrast, can be implemented in a fragmented, largely fee-for-service delivery system if the payer retains the role of financial integrator. Over time, as providers collaborate to improve patient care and optimize their margins, they could more formally integrate into accountable organizations. However, it will and should be their choice to do so.

To facilitate this transition, the current Prometheus pilot sites are not using prospective payment. Instead, budgets are set prospectively, and payers reimburse providers for all fee-for-service claims submitted. Quarterly actual spending for typical and potentially avoidable care is reconciled against the budgets, and detailed reports are made available. Yet the incentives are the same as they would be with prospective payment: if actual spending is under budget, the difference is paid out as a bonus; if it is over budget, some payment is withheld.

Prometheus is not appropriate for reimbursements for all conditions, but there is sufficient evidence to define both typical care and PACs for types of episodes that account for half to two thirds of health care expenditures. At a minimum, our efforts to translate our conceptual model into practice suggest that it can effectively provide a bridge from the current fragmented de-

livery system to an accountable care system in which collaboration and the pursuit of excellence are the norm.

Mr. de Brantes reports serving as chief executive officer of Bridges to Excellence, which runs the Prometheus Payment model. Dr. Rosenthal reports having served on the original design team for Prometheus Payment and on the board of Prometheus Payment and participating in the evaluation of Prometheus pilots with funding from the Robert Wood Johnson Foundation. Dr. Painter reports supervising the implementation grant for the Prometheus Payment pilots for the Robert Wood Johnson Founda-

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