

# Performance-Based Bundled Payments

## Potential Benefits and Burdens

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*Editor's note: This is part of an ongoing series of articles on national health care reform.*

### ABSTRACT

Performance-based bundled payments have emerged as the most recent iteration of pay for performance. These are programs in which providers are paid a single fee for a set of evidenced-based services related to a diagnosis. The payments are typically linked to outcomes as well as other quality measures. This paper reviews two prominent bundled payment programs—PROMETHEUS and ProvenCare—and discusses their potential pitfalls.

In his September 9 address to a joint session of Congress, President Barack Obama specifically called for greater financial accountability, quality, and efficiency within the American health care system. He and his administration have frequently alluded to pay for performance (P4P) and other quality-based incentive programs as important tools for achieving these goals.

Obama's is only one of many voices touting the benefits of P4P in medicine, which has emerged in recent years as a way to ensure quality care. Indeed, many health insurance plans now routinely include some form of P4P in their provider contracts. The most recent trend in P4P is bundled payments, also known as packaged pricing, microcapitation, risk-based contracting, and evidence-based case rates. In this article, we explore this newer iteration of P4P, briefly describing the concept of performance-based bundled payments and the system being designed in Min-

nesota. Then, we discuss two prominent examples of bundled payment programs, PROMETHEUS and Geisinger Health System's ProvenCare. Finally, we present five potential pitfalls of performance-based bundle payments.

### The Concept

The initial goal of P4P programs was to promote quality by aligning physician compensation with evidence-based care. More recently, the concept has been expanded to include cost containment as an additional goal.<sup>1</sup> Although the United States has more than 150 P4P programs and is introducing new ones on what seems like a daily basis, they have shown lackluster results in controlling health care costs. This has prompted the development of alternative performance-based payment programs.<sup>2</sup>

In performance-based bundled payment programs, the average cost to appropriately treat patients for a given condition is determined, and then providers are paid a flat fee for all of the care related to that condition including all office visits, lab work, and other services. The payment is then adjusted based on outcomes and/or patient satisfaction.

An important distinction between P4P and performance-based bundled payments is that performance-based bundles replace, rather than augment, traditional fee-for-service payments. Indeed, performance-based bundled payment programs can be analyzed in terms of their "performance-based" component and their "bun-

dled services" component. That said, the whole may be greater or less than the sum of the individual parts.

### Minnesota and "Baskets of Care"

In Minnesota, the "baskets of care" approach adopted by the Legislature in 2008 represents a statewide attempt at implementing a performance-based bundled payment system. By December 31, 2009, the commissioner of health must determine services that can be packaged into these baskets (thereby bundled for payment) and establish quality measurements for these bundles. Starting in January of 2010, health care providers will be able to bill insurers for these "baskets of care." By July of 2010, Minnesota will be able to offer quality reporting on selected baskets. Workgroups are currently defining what constitutes a basket of care for conditions such as diabetes and total knee replacement.

### Two Prominent Models

Nationally, PROMETHEUS and Geisinger's ProvenCare are the two most widely used performance-based bundled payment programs. Here we briefly describe how they are designed and work.

#### ■ PROMETHEUS

PROMETHEUS, short for Provider Payment Reform for Outcomes Margins Evidence Transparency Hassle-reduction Excellence Understandability and Sustainability, may be the most well-known of the

performance-based bundled payment programs. Developed by PROMETHEUS Payment Inc. in 2006, it assigns evidence-based case reimbursement rates (ECRs) to common conditions including depression, type 2 diabetes, and congestive heart failure.<sup>3,4</sup> A single ECR covers all inpatient and outpatient care associated with a given condition. PROMETHEUS is currently used by health systems across the country.

PROMETHEUS program designers determine the ECRs based on treatment regimens consistent with current care standards.<sup>2,5</sup> Costs are assigned to each element of patient care such as lab work, imaging, and follow-up care. The costs are risk-adjusted based on the severity and complexity of the condition.<sup>6</sup> The PROMETHEUS model allows for further risk adjustment should additional data demonstrate the need.<sup>7</sup> For example, imagine new research demonstrating that patients older than 70 years of age benefit significantly from an additional 30 days of physical therapy following total knee replacement. Under PROMETHEUS, the ECR for total knee replacement payment could be updated to account for this change.

Finally, a quality score is factored in to arrive at the bundled payment amount. The scorecard is an essential part of the PROMETHEUS system, as it ties outcomes, treatment complications, and patient satisfaction to bundled reimbursement.<sup>3</sup> The scorecard ensures that providers are held financially accountable for inappropriate care and patient dissatisfaction.

Under the PROMETHEUS plan, performance incentives can account for as much as 10 percent to 20 percent of the total bundled payment.<sup>3</sup> Like many P4P programs, PROMETHEUS has the potential to exert additional pressure on providers by publicly reporting their rankings based on their quality and patient satisfaction scores.

### ■ Geisinger's ProvenCare

President Obama's September 9 address specifically cited Geisinger Health System of Danville, Pennsylvania, as an example of an integrated, efficient health system.

Contributing to Geisinger's recent notoriety is its unique performance-based bundled payment system, ProvenCare.

ProvenCare was developed by Geisinger as a way to reimburse providers for coronary artery bypass graft surgery (CABG).<sup>8</sup> Under this payment plan, physicians agree to follow 40 preoperative, perioperative, and postoperative treatment guidelines that include such things as prescribing preoperative antibiotics in exchange for a flat rate of reimbursement.<sup>7</sup> The Geisinger P4P program directors believe that when guidelines are followed closely, fewer complications will arise and costs will diminish.<sup>8,9</sup> However, physicians have the ability to deviate from a guideline provided they document their reasoning.

To develop the bundled payment, Geisinger calculated all costs associated with their standards of care for CABG surgeries and added half of the average historical cost of care related to complications.<sup>2</sup> Based on the early success of ProvenCare for CABG, Geisinger is expanding the program to other diagnoses.<sup>10</sup>

### Potential Pitfalls

New payment systems inevitably present new challenges. Critics of P4P programs have identified, among other issues, problems related to risk adjustment, physician autonomy, health care disparities, transparency, and pragmatic inconsistencies between programs. It should be noted that some P4P programs have been modified to address many of these concerns.<sup>11,12</sup> Nevertheless, problems remain. And performance-based bundled payment programs face many of the same issues as other P4P programs as well as some new ones of their own.

### ■ System Size

Bundled payment programs may work well for health care systems already capable of handling complex cases. But systems that do not have a robust network of providers may be unable to provide all aspects of care included in the bundle without outsourcing to other providers. Diabetic patients, for example, may develop

complications that require treatment by a podiatrist, ophthalmologist, physical therapist, and other providers not typically included in a smaller clinic system. To reimburse providers in other groups, bundles would need to be broken apart. Not only would this add an administrative burden, it may make it difficult to attribute performance (and financial accountability) to any given group of providers.

### ■ Cost Control

Left unchecked, bundled payment programs could evolve into a cost-containment mechanism that actually limits appropriate care. For example, in a given year, patients with type 2 diabetes may develop multiple complications that are difficult and time-consuming to treat. Under a traditional P4P program, treating such patients might hurt a provider's chances of receiving a performance-based bonus; but this loss would be mitigated by the increased fee-for-service revenue associated with the increased medical needs of such patients. With performance-based bundled payment programs, the physician might only see a decreased payment and an increased workload.

### ■ Disincentive to Diagnose

An inherent drawback of capitation is that it provides a disincentive to uncovering disease, as doing so has the potential to create more uncompensated work for clinicians. Performance-based bundled payments (aka, performance-based microcapitation) may provide an even greater disincentive to investigate and treat complications of chronic disease. This is because clinicians may not receive additional compensation if the complication falls within the existing bundle. Second, clinicians may actually be penalized for uncovering a complication that is considered a sign of poor-quality care. Unless performance-based bundles account for this misalignment of incentives, clinicians will be forced to do right by their patients at their own financial peril.

### ■ Administrative Burden

Packaging the diagnosis and treatment

of medical conditions into bundles is an additional administrative undertaking. Properly setting up fair compensation plans requires extensive research and development. Such research would need to be done for every bundled diagnosis. Likely, each bundled payment program will calculate its own rates. In a health care system known for its administrative overhead, additional administrative burden without evidence of a positive return on investment is difficult to justify.

### ■ Social Risk Stratification

Complications of chronic diseases disproportionately affect underserved patients, and the physicians who treat them may already receive less performance-based pay.<sup>13,14</sup> These physicians likely will be faced with the prospect of providing uncompensated medical care more often if bundles do not account for the additional care patients in lower socioeconomic strata require. In addition, these patients' need for care coordination may be much greater than that of their wealthier counterparts. Care coordination takes additional time on the part of physicians and clinic staff. This is not to say that bundled payments cannot improve health care for the underserved. Rather, bundled payment programs ought to be designed so that they augment payments to physicians who care for such patients.

### Conclusion

The increasing availability of patient outcome data makes some form of performance-based compensation inevitable.<sup>15</sup> PROMETHEUS, ProvenCare, and other performance-based bundled payment programs use complex data modeling and evidence-based guidelines to establish value-based payments to physicians. These models aim to contain costs and provide increased transparency related to reimbursement for services. Most important, they link reimbursement to performance and quality improvement. It remains unknown whether these payment mechanisms will yield better results than other P4P programs.

Performance-based bundled pay-

ment programs potentially introduce new problems related to applicability, fairness, administrative burden, cost, and quality of patient care. As Minnesota's insurers, health systems, and state officials move forward with performance-based bundles and baskets of care, it is important that they remain cognizant of these potential pitfalls—both in designing their programs and in monitoring their impact. **MM**

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### REFERENCES

1. Spinelli RJ, Fromknecht JM. Pay for performance: improving quality care. *Health Care Manag.* 2007; 26(2):128-37.
2. Rosenthal MB. Beyond pay for performance—emerging models of provider-payment reform. *N Engl J Med.* 2008;359(12):1197-200.
3. Debrantes FD, Camillus JA. Evidence-Informed Case Rates: A New Health Care Payment Model. April 2007.
4. PROMETHEUS Payment Inc., website. Available at: [www.prometheuspays.org/](http://www.prometheuspays.org/). Accessed September 1, 2009.
5. Terry K. Can this payment model work? *Med Econ.* 2006;83(22):22,24.
6. Gosfield AG. PROMETHEUS Payment: Getting Beyond P4P. *Group Practice J.* October 2006.
7. de Brantes F, Gosfield AG, Emery D, Rastogi A, D'Andrea G. Sustaining the Medical Home: How PROMETHEUS Payment Can Revitalize Primary Care. Technical Appendix C: Chronic Care ECR Estimator. Prometheus Payment Inc. May 8, 2009. Available at: <http://www.rwjf.org/pr/product.jsp?id=42555>. Accessed September 1, 2009.
8. Casale AS, et al. "ProvenCareSM": a provider-driven pay-for-performance program for acute episodic cardiac surgical care. *Ann Surg.* 2007;246(4):613-3.
9. Lee TH. Pay for performance, version 2.0? *N Engl J Med.* 2007;357(6):531-3.
10. Vesely R. Ready to fire up. *Modern Healthcare.* 2008;38(17):17.
11. Casalino LP, Elster A, Eisenberg A, Lewis E, Montgomery J, Ramos D. Will pay-for-performance and quality reporting affect health care disparities? *Health Aff.* 2007;26(3):w405-14.
12. Satin DJ. The Impact of Pay for Performance on Health and Healthcare Disparities. 2009 Congressional Black Caucus Health Braintrust and National Minority Quality Forum Sixth Annual Health Disparities Leadership Summit. Washington DC, April 27-28, 2009.
13. Satin DJ. Paying Physicians and Protecting the Poor. *Minn Med.* 2006;89(4):42-4.
14. Werner RM, Goldman LE, Dudley RA. Comparison of change in quality of care between safety-net and non-safety-net hospitals. 2008;299(18):2180-7.
15. Satin D, Miles J. ACCORD, ADVANCE, and P4P: the data-driven future of quality improvement. *Minnesota Physician.* March 2009.