Payment Reform

Background Information Prepared for the Health Care Transformation Task Force
by Minnesota Department of Health Staff
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The concept of health care payment reform is currently a topic of considerable attention among policymakers who want to find ways to improve health care quality and health outcomes while controlling health care cost growth. Central goals of payment reform include changing financial incentives for health care providers and patients in ways that:

- Reward higher quality, instead of volume of services;
- Reduce fragmentation of care and promote a more coordinated, team-based approach to care;
- Encourage greater efficiency in resource use;
- Emphasize and reward prevention and management of chronic disease; and
- Avoid the perverse incentives caused by payment rates that are too high for some types of services and too low for others.

This background paper presents an overview of several different types of payment reform, with specific case study examples where they are available; however, there is little systematic evidence to date of the impact of the types of major payment reforms that are currently being considered.

The types of payment reform included in this background paper include:

- Bundling payments for groups of services;
- Providing explicit payment for care coordination and management services that have the potential to reduce costs by avoiding preventable and costly complications; and
- Providing incentives to improve system efficiency.

For purposes of this background paper, pay for performance is not included as a type of payment reform. The reason for this is that most pay for performance mechanisms simply pay a bonus on top of existing payments, without fundamentally changing the ways that health care services are paid for. In fact, many experts believe that pay for performance is best viewed as a short-term strategy for improving quality until new systems can be developed that fundamentally change incentives throughout the health care system.

A much more extensive discussion of the various types of payment reform, the goals of each, and the potential advantages and disadvantages associated with each can be found in Harold Miller's paper "Creating Payment Systems to Accelerate Value-Driven Health Care: Issues and Options for Policy Reform," forthcoming from the Commonwealth Fund.

Bundling Payments for Groups of Services

Current payment systems generally are structured in a way that includes (1) fixed payments for all non-physician services provided during an inpatient hospital stay (with variation based on diagnosis and severity of illness), and (2) fees paid according to a fixed fee schedule for each individual service provided by a physician (for either inpatient or outpatient care) or by a hospital outpatient clinic. A major criticism of current payment systems is that they reward providers for delivering more services than necessary, and penalize providers who try to improve efficiency by delivering fewer services.

One approach to changing incentives in the current system that reward volume rather than quality is to bundle payments for groups of services. This idea is essentially an extension of current methods of paying for inpatient hospital care (a fixed price for the entire "bundle" of services delivered during a hospital stay) beyond the inpatient setting to include care provided in other settings as well. The bundled payments can be made to a single organization (e.g., an integrated care delivery system) or for a single episode of care involving multiple providers.

The "unit" of service in many proposals to bundle payments is the episode of care. The definition of an "episode" may depend on the type of health condition: for example, for a chronic condition such as diabetes, an episode could include all care provided during a fixed time period (e.g., six months or a year); for acute conditions like heart attacks, an episode would include all services provided from the beginning to the end of treatment (e.g., care prior to hospitalization, hospitalization, and post-hospitalization care for a certain period of time).

Compared with a fee for service payment system, where the provider is reimbursed according to the volume of services provided, a payment system based on bundles of care involve higher financial risk for providers; however, providers also have more to gain by improving care quality in ways that reduce the amount of care needed and lower costs. This type of system is also different than traditional capitation payment, since the payment amount is based on the conditions/diseases that the patient has, rather than being a fixed amount for each patient, regardless of their health status.

Example 1: Geisinger Health System

Geisinger Health System (GHS) is a large integrated health care system in Pennsylvania that includes a health plan, three hospitals, and over 50 office practices. Beginning in February 2006, GHS placed a 90-day "warranty" for care provided to all non-emergency coronary artery bypass graft (CABG) patients and began charging a single price for a bundle of services that included hospitalization and all related care for a 90-day period, including any readmissions for complications. The price for this bundle of services was set equal to the estimated cost of a typical hospitalization for CABG surgery plus half of the average cost of post-acute care for the 90-day period following surgery. To define appropriate interventions and prevent complications, GHS' cardiac surgeons agreed on

40 essential steps for CABG procedures, and GHS set a goal of reducing its post-discharge costs for CABG patients by 50%.[1,2]

A preliminary study of outcomes and costs for patients treated under "warranty" between February and October of 2006 compared with patients treated in 2005 showed that "warranty" patients experienced:

- 5.2% lower hospital charges;
- a 12% decrease in average length of stay; and
- a slight reduction in complication rates.[3]

The ability to generalize from this experience is limited by several factors. The payment reform was limited to only one type of procedure, and the evaluation period was short (the first six months after implementation). In addition, GHS is different from most health care systems because it is a large integrated system that includes a health plan and has a sophisticated electronic medical record system.

Example 2: Medicare Participating Heart Bypass Center Demonstration

This Medicare demonstration project involved bundling of all Medicare Part A and Part B services into a single payment rate for CABG surgery for an episode of care, including readmissions. It took place between 1991 and 1996 and involved patients treated at seven hospitals. Hospitals and physicians involved in the demonstration could divide the global payment in any way they chose.

This demonstration is one of the only examples of payment reform involving bundling where an evaluation of the impact over a long period of time is available. All participating hospitals exhibited declines in lengths of inpatient stay; Medicare saved $42.3 million on patients treated in demonstration hospitals (or approximately 10% of expected spending on CABG patients). In addition, participating hospitals experienced a decline in mortality rates, improved patient satisfaction, and patients saw fewer physicians.[4] As with the GHS example, generalizability of the results of this demonstration is limited by the fact that it only involved one type of treatment.

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[1] Abelson, R. "In Bid for Better Hospital Care, Heart Surgery With a Warranty." *The New York Times,* May 17, 2007.
[2] Lee T. "Pay for Performance, Version 2.0?" *New England Journal of Medicine*, August 9, 2007, p. 531-533.
[3] Casale AS, Bothe A, Jr., Paulus R, Selna M, McKinley K, Doll MC, Berry SA, and GD Steele. "ProvenCare, A Provider Driven Pay for Performance Program for Acute Episodic Cardiac Surgical Care." Geisinger Health System, Danville, PA. (abstract submitted for the 2007 American Surgical Association Annual Meeting.) http://www.americansurgical.info/abstracts/2007/20.cgi
[4] Cromwell J, Dayhoff D, McCall N, Subramanian S, Freitas R and R Hart; "Medicare Participating Heart Bypass Center Demonstration" Health Economics Research Inc., July 24, 1998.

Care Coordination and Management

Care coordination models of payment reform are intended to promote greater use of prevention and primary care services, with the goal of saving money by preventing the need for more expensive services and interventions in the future. These models are considered a type of payment reform because they would establish ways of paying providers for services that are not explicitly reimbursed under current payment systems. Examples of the types of services that are included in this type of payment reform include patient education, support and monitoring services (e.g., nurse phone contact with patients), payment for coordination of care among different providers who may be involved in caring for a patient, or implementation of a medical home model of care.

Current fee for service payment systems have few incentives for communication and coordination across providers. As noted earlier, the system rewards volume and so provider actions that improve care coordination (and reduce volume of services) can actually end up harming the provider financially.

Example 1: Medicare Coordinated Care Demonstration

In 2002, Medicare selected 15 sites to participate in its Coordinated Care Demonstration project. The program was designed to test the impact of care coordination models on patient satisfaction, health outcomes, and Medicare spending. The demonstration involved Medicare beneficiaries with complex chronic conditions, and outcomes and costs for patients receiving care coordination services were compared to randomly selected control groups of people with similar conditions. Care coordination providers in the 15 projects (these included commercial disease management companies, hospitals, academic medical centers, an integrated delivery system, and other entities) were paid a negotiated monthly fee per patient for their services, which ranged from $50 to $437, depending on the severity of the patient's illness.

According to a formal evaluation of the first two years of the project,[5] only 1 of the 15 sites showed a statistically significant reduction in hospitalizations, and there were no differences in spending for people in the care coordination program vs. the control group. People enrolled in the care coordination program were largely satisfied with it, and were more likely to report that they received health education materials; however, there were no clear effects of the program on patients' adherence to self-care guidelines.

Characteristics of the more successful care coordination programs included:

- Hiring well trained registered nurses as care coordinators;
- Conducting a large share of the contacts in person; and
- Focusing on improving the communication between doctors and patients.

[5] Mathematica Policy Research, "Second Report to Congress on the Evaluation of the Medicare Coordinated Care Demonstration," December 15, 2006.

In this evaluation, extensive use of information technology and electronic medical records were not found to be associated with better quality or cost performance.

The evaluation of this program notes that the relatively small numbers of people enrolled in the programs makes it difficult to find statistically significant effects, and also that 2 years may be too short a time period for the effects to become apparent (the demonstration was for a 4-year period). More research is needed to fully understand the impact of care coordination on costs and to identify the most effective program designs.

Example 2: Medical Home

The medical home model is built around the idea that patients benefit from having one physician who is actively engaged in coordinating all of their health care. The medical home concept is focused on improving communication between patients and *all* of their health care providers through the use of one coordinating physician.

We were unable to find many published studies that directly estimated the cost savings of medical homes. However, a study in Boston, Massachusetts evaluated the impact of a medical home model on 150 children with special health care needs. This study found that implementing a medical home model improved patient and family satisfaction with care, reduced hospitalizations by 15 percentage points, and was fairly low cost (around $400 per child per year).[6]

Although it is not a direct example of implementing a medical home model, recent experience from the Mayo Clinic has also been used to illustrate the potential impact of changes in incentives that encourage greater reliance on primary care.[7] In 2004, the Mayo Clinic changed the benefit set provided in its employee health plan to provide enrollees with financial incentives to use primary care rather than specialty care (by requiring a copayment for specialty care physician visits but not for primary care physician visits).

In the two years following this change, there was a reduction in hospitalizations, specialty care visits, and diagnostic testing, while the number of primary care visits increased. Total and per capita expenditures declined by about 10 percent.

By one estimate, if implementing this model throughout the state achieved a similar impact (10% per capita cost reduction), it could result in savings of around $2.8 billion per year. However, it is important to note that this is merely an illustration of the *potential* for savings associated with increased reliance on primary care versus specialty care, and not an estimate of the net savings associated with payment reform involving medical homes. The example described above involved a large employer providing a

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[6] Palfrey JS, Sofis LA, Davidson EJ, Liu J, Freeman L, Ganz ML, "The Pediatric Alliance for Coordinated Care: Evaluation of a Medical Home Model," *Pediatrics,* May 2004, vol 113 (5 Suppl), p. 1507-16.

[7] George Schoephoerster, and Douglas L. Wood, "Patient-Centered Medical Home," Presentation to the Health Care Access Commission Workgroup on Identifying Health Care Costs/Savings, August 14, 2007.

very generous insurance benefit set, which is likely not typical of the benefit sets available to most Minnesotans.

Promoting Efficiency Through Shared Savings and Integrated Care

Sharing savings is another approach to encouraging cost effective, well-coordinated care. Medicare's Physician Group Practice Demonstration and recent reforms at the Virginia Mason Medical Center provide two examples of how the shared savings model can be used to encourage investment in care coordination and quality improvement.

Example 1: Physician Group Practice Demonstration
Ten large, multi-specialty physician group practices agreed to participate in this 3-year demonstration, which started April 1, 2005. The 10 groups represent 5,000 physicians and over 220,000 Medicare beneficiaries.

In this demonstration, Medicare beneficiaries are assigned to the physician group that has provided most of their care in the past. Physician practices are responsible for improving quality and containing costs for all of the beneficiaries assigned to them. The practices are eligible for performance payments *if the growth in Medicare spending for their assigned populations is more than 2 percentage points lower than the growth rate of Medicare spending in their local markets.* The demonstration provides an incentive for the practices to invest in care coordination and quality improvement infrastructure in order to generate savings and receive bonuses.[8]

Physician practices employed a variety of strategies to improve quality and lower costs including chronic disease management programs targeted at high cost beneficiaries, use of patient registries, use of electronic decision support to encourage evidence-based care, modifying physician work processes to improve coordination and avoid overtreatment, and enhanced discharge planning to avoid readmissions.

All of the practices participating in the demonstration met or exceeded the quality standards for diabetes; practices will be evaluated on the quality of preventive, coronary artery disease, and congestive heart failure care in future years. Only two practices qualified for bonuses under the savings criteria. Despite this, most participating practices felt that the investments in patient care were worthwhile even without the bonuses.

Example 2: Virginia Mason Medical Center
Virginia Mason Medical Center (VMMC) is a non-profit, integrated delivery system located in Seattle. VMMC undertook cost reduction and care improvement efforts after Aetna, a major insurer in the region, threatened to exclude VMMC from its high performance network. VMMC, Aetna, and employers worked together to improve efficiency of care for four common conditions: low back pain, gastroesophogeal reflux

[8] Physician Groups Improve Quality and Generate Savings Under Medicare Physician Pay for Performance Demonstration, press release from the Centers for Medicare and Medicaid Services, July 11, 2007

disease (GERD), migraines, and cardiac arrhythmia.[9] VMMC restructured patient traffic and decreased use of expensive diagnostic testing and name-brand medications.

Preliminary findings showed significant savings. For example, VMMC was able to reduce its costs for treating low back pain by 11%. This savings was achieved by eliminating unnecessary MRIs and treating patients with lower cost services, such as physical therapy. However, the reduction in MRI use (which is a high profit service) resulted in a financial loss for VMMC. VMMC resolved this problem by appealing to employers, who encouraged Aetna to increase its reimbursement rates for physical therapy by 16%.[10]

The ability to generalize from this approach is somewhat limited by VMMC's status as an integrated delivery system and by the unusually high level of cooperation between providers, health plans, and employers. Also, the intervention involved four conditions that did not account for a very large share of VMMC's revenues. However, it provides a useful example of how current payment systems discourage efficiency improvements and how a shared savings model could be used to encourage more efficient care.

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[9] Pham, H.; Ginsburg, P.; McKenzie, K.; and Milstein, A. "Redesigning Care Delivery in Response to a High-Performance Network: The Virginia Mason Medical Center." *Health Affairs* web exclusive, July 10, 2007.

[10] Fuhrmans, V. "A Novel Plan Helps Hospital Wean Itself Off Pricey Tests." *The Wall Street Journal*, January 12, 2007.