From VOLUME to VALUE

Transforming Health Care Payment and Delivery Systems to Improve Quality and Reduce Costs

NRHI Healthcare Payment Reform Series

BETTER WAYS TO PAY FOR HEALTH CARE

A Primer on Healthcare Payment Reform
Introduction: Moving From Volume to Value

The serious problems with the quality and cost of today’s health care system have been well documented. A major cause of these problems is that current health care payment systems encourage *volume-driven* health care rather than *value-driven* health care. Under current payment systems, physicians, hospitals and other health care providers gain increased revenues and profits by delivering more services to more people, which in turn fuels inflation in health care costs. Research has shown that more services and higher spending do not result in better outcomes; indeed, it is often exactly the opposite.

But what is even more troubling is that current payment systems often financially *penalize* health care providers for providing better quality services. Providers frequently lose revenues and profits if they keep people healthy, reduce errors and complications, and avoid unnecessary care. This not only leads to many of the problems in health care quality that exist today, but impedes efforts to *improve* quality by forcing a tradeoff between a health care provider’s financial well-being and the quality of their services.

A variety of pay-for-performance (P4P) programs have been created in an effort to address this problem. However, rather than fixing the underlying disincentives, these programs merely add a new layer of rewards and incentives for quality improvement and cost containment on top of the existing payment systems. While well intended, there is a growing recognition that most current pay-for-performance initiatives won’t by themselves solve the fundamental problems and disincentives that are built into the underlying payment systems. Moreover, pay-for-performance systems may unintentionally result in an overly narrow focus on the specific processes being rewarded, potentially causing providers to lose sight of the true goal—improving patient outcomes.

This paper provides a framework for understanding how current payment systems work and how better payment systems can be designed. It is intended to help purchasers, payers, providers, policy-makers, consumers and civic leaders understand why fundamental payment reforms are needed and to encourage them to support implementation of better payment systems that will help move towards a more value-driven health care system.

Although this paper does not address the issue of the uninsured per se, the issues it raises are highly relevant. Since the growing problem of the uninsured is due in substantial part to the rapid escalation of health care costs, using payment reform to control costs and improve quality should help address one of the root causes of inadequate insurance coverage as well as make insurance coverage solutions more affordable.

A Framework for Understanding Health Care Payment Systems

Focusing on Value, Not Volume.

There is widespread agreement that the health care system today does not provide good value, where “value” is defined as the combination of both quality and cost. A variety of studies have
demonstrated that there are serious problems with the quality of health care, ranging from failure of many patients to receive services of proven value to unacceptably high rates of medical errors, adverse events, iatrogenic illness, etc. At the same time, the cost of health care has reached unaffordable levels, which is a major cause of high rates of uninsurance across the country. As noted above, health care systems have strong incentives to focus on volume, not value. One of the fundamental impediments to improving value in health care is that efforts to improve quality and reduce cost are often perceived as being at odds with each other:

- Patients often believe that lower cost means lower quality and that efforts to reduce cost will require “rationing” or restrictions on their ability to receive needed care.
- Payers often believe that higher quality means higher cost, and providers often request higher payments to support initiatives to improve the quality of care delivery.

Yet in industries other than health care, consumers routinely reap the benefits of higher value from both improved quality and lower cost. In health care, there are easily identified examples where improvements in both quality and cost are possible. For example:

- Health care-acquired infections and other adverse events. Numerous studies have shown that unnecessarily high rates of preventable adverse events occur within hospitals and other health care settings. In most cases, payers pay more when these events occur, and patients suffer from them, often seriously. Clearly, reducing these adverse events would be a win-win for both quality and cost.
- Hospital admissions and readmissions. Numerous studies have also shown that a large number of hospitalizations are preventable, particularly among patients who have what are known as “ambulatory sensitive conditions,” such as asthma, chronic obstructive pulmonary disease, congestive heart failure, diabetes, etc. In addition, a high proportion of people who are hospitalized are readmitted within 30 days, frequently for the same condition that they were admitted for or for a complication or infection resulting from that initial admission. Payers pay more when these admissions and readmissions occur, and patients suffer from them. So reducing admissions and readmissions represents a potential win-win for both quality and cost.

The problematic incentives in current health care payment systems are increasingly recognized as one of the major barriers to addressing these kinds of problems. Although not all quality and cost problems are caused by payment systems and not all quality and cost problems can be resolved by changes in payment systems, it is clear that in many cases payment reform is at least a necessary element of efforts to increase the value provided by the nation’s health care system.

The Health Care Cost Equation.
Understanding how current health care payment systems work against value requires understanding the factors that drive health care costs. In any economic sector, total expenditures on a good or service are the product of two factors: (1) the quantity of the good or service that is consumed, and (2) the price or cost of the good or service.

Similarly, health care expenditures are a function of two distinct factors: utilization and unit cost/price. As shown in Figure 2, the rate of health care expenditures (i.e., cost) per person will increase if more people have conditions needing care, if the cost of caring for an individual condition increases or both. In the example
shown, health care expenditures will rise if more people have heart disease, if the cost of treating an individual case of heart disease increases or both.

But this is too simplistic an analysis for understanding health care payment because each of these two factors, particularly “cost per condition,” is itself a function of other factors, each of which can be affected differently by different systems of paying for health care.

Figure 3 shows the same equation with a more detailed breakdown of cost per condition. This shows that total cost is driven by the number of “episodes of care” per condition (e.g., How many heart attacks does the person with heart disease have?), how many and what types of health care services they receive in each episode (e.g., When they have a heart attack, do they get coronary artery bypass graft surgery, a stent, angioplasty or simply medical management?), how many and what types of processes, devices, drugs, etc. are involved in each service (e.g., What type of stent does the heart attack patient receive, what procedures are followed to prevent infections, etc.?), and finally, the costs/prices of each of those individual processes, devices, drugs, etc.

The “number of conditions per person” is also affected by other factors, some of which can be influenced by the health care system and the patient and some of which cannot, at least with current knowledge and technologies. For example, as shown in Figure 4, the rate at which people develop heart disease can be reduced through improved health care and healthier lifestyles, although it may not be possible to completely eliminate heart disease even with best efforts by both health care providers and patients.

**The Causes of Health Care Cost Inflation**

To understand the sources of health care cost inflation and the reasons why current payment systems have been unsuccessful in controlling it, one can think of the health
care cost equation as a balloon, as shown in Figure 5.

If one “squeezes the balloon” by trying to control the costs of individual processes or services alone, the costs may well “pop out somewhere else,” e.g., through an increase in the number of services provided. And if one tries to control the number of services within a particular episode of care, the result may simply be more episodes of care. For example, placing arbitrary limits on the costs of hospital stays may result in patients being readmitted more frequently.

**How Payment Systems Address the Health Care Cost Equation**

The most common way of paying for health care services today is the fee-for-service system. Physicians and other health care providers get paid a fixed fee for each discrete service they provide, in most cases with no predefined limits on the number of services that can be provided. In the framework of the health care cost equation, fee-for-service payment puts the provider at risk for the number and cost of processes within each service covered by a separate fee, but nothing else.

As shown in Figure 6, this results in some of the problems in health care quality and costs today:

- **It rewards volume:** There is no limit on the number of services. And drawing on the balloon analogy again, if one tries to limit the fees for services too much, providers will be encouraged to increase the number of services they provide in order to maintain their incomes.

- **It does not penalize poor quality:** Efforts to limit fee levels may also result in providers eliminating desirable processes as part of a service, either in an intentional effort to reduce costs or simply because they don’t feel they have as much time to follow all of the processes that would be desirable.

- **It focuses on the short term, not the long term:** Efforts to control overall service expenditures encourage payers to resist paying for some services, even if they might have long-term value in improving health or otherwise reducing the need for services in the future.

**Band-Aids on a Broken System**

A variety of efforts have been made to try and address these problems. Two of the most common are:

- **Utilization controls.** In order to restrain the natural incentive for providers to generate more volume, payers have instituted a variety of systems to “squeeze the balloon...
harder” and discourage the provision of unnecessary services. For example, two common approaches are to require providers to obtain pre-authorization from a payer before a service can be delivered and to create detailed criteria defining the circumstances when services will be paid for and when they will not.

- **Pay for performance.** In order to counter the tendency for providers to eliminate or “forget” to deliver desirable processes as part of a particular service, a growing number of payers have established pay-for-performance systems. These systems provide bonus or incentive payments (or more rarely, penalties) for providers based on the rate at which they actually perform the specific processes viewed as desirable. For example, in the case of heart attack patients, there are pay-for-performance systems that give payment rewards to hospitals based on whether heart attack patients are given aspirin when they arrive at the hospital. In the case of diabetes, since many physicians “forget” to do checks of hemoglobin A1c levels on diabetic patients (perhaps because the fees they are paid for patient visits allow too little time to do everything a patient needs), a number of P4P systems pay the physicians more for remembering to do those checks.

These systems can lead to a level of micromanagement of providers by payers that is not only undesirable, but inefficient. For example, most P4P systems focus on rewarding processes rather than outcomes, which may (a) reward providers with poorer outcomes, and (b) unintentionally deter innovation and experimentation with new processes that achieve better outcomes. Since measures are only available for a subset of the processes that are important to good outcomes, rewarding only a subset of processes may divert attention from other important processes.

Moreover, the amount of performance bonuses and penalties in most P4P systems is relatively small, reducing the likelihood that they can offset the powerful incentives for volume in the underlying payment system. In fact, the reductions in a provider’s net revenues from implementing a quality improvement initiative may exceed the payment incentives provided through a pay-for-performance system for that initiative.

**The Strengths and Weaknesses of Capitation**

During the 1990s, a dramatically different solution called capitation was developed to address the problems of the fee-for-service system. Capitation means paying a provider—typi-
cally a primary care physician or a health care system—a fixed amount per patient to provide care for all of the patient’s conditions. Under capitation, the amount paid per patient is the same for all patients cared for by the provider, regardless of how well or sick the individual is or how many services are provided.

As shown in Figure 7, the capitation system “solves” (or at least reduces) the problems caused by the fee-for-service system in the following ways:

- **It controls volume**: Because the provider is paid the same amount regardless of the number of services provided, there is no longer an incentive to provide more services simply to increase revenues.

- **It avoids micromanagement**: At the same time, there are no restrictions on which services will be paid for; so the provider is compensated regardless of which combination of services they choose to deliver.

- **It penalizes poor quality**: The provider has an incentive to ensure that key processes of care are delivered because they will be responsible for providing some or all of the remedial services that may be needed with no added compensation.

However, in trying to address these problems, capitation—at least as it has been most commonly implemented—went too far in the other direction, incorporating every factor in the health care cost equation into a single payment. Most importantly, traditional capitation puts providers at risk for how sick or well their patients are, when the providers have little or no ability to control that. This creates a strong and undesirable incentive for providers to avoid patients who have multiple or expensive-to-treat conditions. Under capitation, a number of providers have experienced significant financial difficulties or bankruptcies if they took on patients regardless of their needs.

### Distinguishing Insurance vs. Performance Risk

In effect, what traditional capitation payment arrangements do is transfer all cost risk to the provider. But a portion of that risk—the risk of whether a patient has an illness or other condition requiring care—is really what insurance is all about. In contrast, once a patient has an illness or condition requiring care, it is appropriate for health care providers to take

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**Figure 7**

<table>
<thead>
<tr>
<th>VARIABLES FOR WHICH THE PROVIDER IS AT RISK UNDER ALTERNATIVE PAYMENT SYSTEMS</th>
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<tbody>
<tr>
<td>Cost Person = # Conditions Person x # Episodes of Care Condition x #/Type Services Episode of Care x # Processes Service x Cost Process</td>
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</table>

- **Fee for Service**
  - Services Limited by Total $ |
  - Any Service Included |
  - Incentive for Key Process |

- **Full Capitation**
  - Provider at Risk for Sicker Patients
responsibility for their performance in delivering services to address that illness or condition in a high-quality and efficient manner.

As shown in Figure 8, payers (health insurance plans, self-insured employers or government programs providing health benefits) should take responsibility for insurance risk, and providers should take responsibility for performance risk. (Other authors have labeled the two types of risk “probability risk” and “technical risk.”)²

There is no hard line distinguishing where insurance risk ends and performance risk begins. One patient may be harder to treat than another for the same condition or may have adverse reactions to treatment due to unmeasurable factors that are outside the control of a physician, making it difficult to say how much of the higher costs of treatment are an insurance risk vs. a performance risk. But it is clear that not all of the costs of health care should be considered pure performance risk—as traditional capitation systems would imply—and fewer health care costs are insurance risk than fee-for-service systems implicitly give insurers responsibility for.

**New and Better Payment Models**

Fortunately, there is a middle ground between fee for service and traditional capitation that can strike a better balance between insurance risk and performance risk than either of those approaches do, while still moving away from the volume-driven health care system engendered by fee-for-service payment systems.

**Figure 8**

VARIABLES FOR WHICH THE PROVIDER IS AT RISK UNDER ALTERNATIVE PAYMENT SYSTEMS

<table>
<thead>
<tr>
<th># Conditions / Person</th>
<th># Episodes of Care / Condition</th>
<th>#/ Type Services / Episode of Care</th>
<th># Processes / Service</th>
<th>Cost / Process</th>
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<tr>
<td>INSURANCE RISK</td>
<td>What Health Insurance Should be Responsible for Managing</td>
<td>PERFORMANCE RISK</td>
<td>What Health Care Providers Should be Responsible for Managing</td>
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One model is “episode-of-care payment,” which means paying a single price for all of the services needed by a patient for an entire episode of care. This kind of payment approach is most appropriate to isolated acute care episodes with a reasonably clear beginning and a reasonably clear endpoint. For example, once a patient has a heart attack, a single payment would be made to a provider for all of the care needed by that patient for the heart attack. This single payment is also frequently called a “case rate,” i.e., there is a single payment for the case rather than multiple fees for each of the specific services provided within that case.

For many patients, however, their condition does not end in a fixed period of time; they may need care over an extended period of time. For example, people with chronic diseases such as asthma, chronic obstructive pulmonary disease (COPD), congestive heart failure (CHF) and diabetes will generally live with those con-
ditions for the rest of their lives. Many of them are hospitalized multiple times with no fundamental change in their underlying condition. But the rates at which they are hospitalized can be significantly affected by the type of care they receive outside of the hospital.

For these patients, paying for each hospitalization on an episode-of-care basis may help to control the costs of each hospitalization, but it does nothing to control the number of episodes (hospitalizations) that the person experiences. Moreover, there will likely not be a clear endpoint to each episode, making the definition of the payment for the episode particularly challenging. Instead, it makes sense to pay providers for all of the care that these patients need over a fixed period of time, including as many or few episodes as are needed during that period of time. This approach can be called “condition-specific capitation” or “risk-adjusted global fees.”

Condition-specific capitation means that while there is a single payment for a patient, the amount of that payment varies depending on the specific conditions that the patient has, unlike traditional capitation. While the term “global” sounds like it might mean “worldwide,” it is intended merely to indicate that all providers and all services are covered by a single fee or payment. (Better names are needed, since neither of these is either easily remembered or readily understandable.) Regardless of the name, the idea is that the provider is paid a case rate rather than individual service fees. In contrast to episode-of-care payment, though, the case rate is for an inherently arbitrary period of time (e.g., a calendar year) rather than being defined by a resolution of the patient’s condition.

A key aspect of both episode-of-care payment and condition-specific capitation systems is that the amount of the payment varies based on the precise nature of the patient’s conditions, particularly those aspects of the patient’s conditions that are outside of the provider’s control. In contrast, a traditional capitation system pays the same amount regardless of the patient’s condition. Clearly, a provider should be paid more for caring for a congestive heart failure patient who also has diabetes or other co-morbidities than for a patient who has congestive heart failure and no other co-morbidities. A provider should be paid more for caring for a heart attack patient with significant artery blockage than one with minimal blockage. Although this reflects the fact that one patient will likely need more expensive care than the other, it is up to the provider to determine exactly what is needed,

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### For Acute Conditions:
- **Fee for Service**

### For Chronic Disease:
- **Condition-Specific Capitation or Risk-Adjusted Global Fees**
- **Performance Risk**

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**Figure 9**

**Variables for Which the Provider is at Risk Under Alternative Payment Systems**

- **Cost Person** = **# Conditions Person** x **# Episodes of Care Person** x **# Type Services Episodic of Care** x **# Processes Service Process**

- **For Acute Conditions:**
  - **Fee for Service**

- **For Chronic Disease:**
  - **Condition-Specific Capitation or Risk-Adjusted Global Fees**
  - **Performance Risk**
rather than having an incentive to provide more expensive services to a patient than are actually needed, as is the case under the fee-for-service system.

It should be noted that “condition-specific capitation” is very different from “contact capitation,” a variant of capitation that was used in the 1990s. Contact capitation paid a particular specialist or group of specialists a fixed amount for each patient who came to them for service, regardless of the exact conditions those patients had. Condition-specific capitation pays a different amount depending on the patient’s condition, but the amount of the payment is independent of which specialists or services they use.

**Price-Setting as Well as Payment Structure**

In either of these different payment models, there is still the challenge of price setting. The phrase “price” here is intended to mean the “cost to the payer.” It is not the “charges” that many health care providers currently establish for their services but rarely collect. Even though the relative incentives created by either episode-of-care payment or condition-specific capitation would be better than what exists today, if the price of an episode or a case is set too low, providers may still be forced to either underprovide care or suffer financially. If the price is set too high, the pressure for efficiency will be less and costs will inherently increase. There are three basic approaches to determining prices, which could be applied to either episode-of-care payment or condition-specific capitation:

- **Price-setting by the payer.** This is the approach that Congress and Medicare use to (a) establish the rates paid to hospitals under the diagnosis-related groups (DRG) system that classifies hospital cases into groups that are expected to use similar hospital resources, and (b) the fees paid to physicians under the resource-based relative value scale (RBRVS) system that estimates the costs of the resources needed to provide a service, including the time it takes to perform the service, the technical skill and other factors.

- **Negotiation between the payer and provider.** This is the method commercial health plans typically use in determining the amounts they will pay providers.

- **Price-setting by the provider.** Although this model is used in most other economic sectors, it has been less frequently used in the world of health care, other than for services where consumers pay all or most of the cost of the service.

Although there is considerable interest in trying to increase the use of the third approach—price-setting by providers—the challenge in health care is that because prices are actually paid by third-party payers rather than by the consumers of the services, the incentives for consumers to choose lower-cost providers and the incentives for providers to reduce their prices to attract consumers are weak or nonexistent. A variety of methods of creating greater price sensitivity for consumers have been proposed or attempted, many of which are generally referred to as “consumer-directed health plans.” However, so far, most of these systems give only limited incentives to consumers to use lower-cost providers, since they only require the consumer to pay a portion of the “first dollar” that the provider charges, rather than the “last dollar,” i.e., the difference in prices between higher-cost and lower-cost providers.

**What an Episode-of-Care Payment System Might Look Like**

Participants at the 2007 NRHI Summit on Healthcare Payment Reform recommended the creation of an episode-of-care payment structure for major acute episodes and outlined
many of the key elements that should be included:

- A single, bundled episode-of-care payment would be paid to a group of providers to cover all of the services needed by the patient during the episode of care. (Combining the payments for multiple providers into a single payment is generally referred to as “bundling” payment.) This case rate would be paid instead of individual fees or DRG payments.

- The group of providers would include all of the hospitals, physicians, home health care agencies, etc. involved in the patient’s care for that episode. The providers would be encouraged to create joint arrangements for accepting and dividing up the episode-of-care payment among themselves.

- The amount of the episode-of-care payment would vary based on the patient’s diagnosis and other patient-specific factors. However, there would be no increase in payment to cover preventable adverse events such as errors and infections.

- The amount of the episode-of-care payment would be prospectively defined (i.e., it would be established before the care actually took place), but would include a retrospective adjustment based on the level of outcomes achieved by the provider group. For example, if the provider group had an unusually high mortality rate, even after adjusting for patient severity and risk, its payment would be reduced. There would be some adjustments in payment made for cases requiring unusually high levels of services, but only if improved outcomes were achieved through those higher levels of service.

- A regional collaborative organization would estimate the cost of providing good-quality care for each type of patient, but provider groups would bid and negotiate the amount of the actual episode-of-care payment they

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**How Episode-of-Care Payment Would Work in a Hypothetical Case**

Ms. Brown falls and breaks her hip and goes into the hospital for surgery to implant a prosthetic hip.

Each of the hospitals in the community has defined a price that it will charge Ms. Brown’s insurance company for performing the surgery and providing all of the postoperative care for a woman of Ms. Brown’s age and health status. That price will cover Ms. Brown’s hospital care, her surgeon’s fees, the cost of her prosthetic hip, her care by any other physicians who are involved (e.g., anesthesiologists, intensivists, etc.), her post-hospital rehabilitation and any home care she may need to make sure she can return home safely. The hospital will be responsible for dividing up the payment among all of those providers.

If Ms. Brown develops an infection in the hospital following surgery, the hospital and its physicians will be responsible for treating that infection at no additional charge.

The insurance company measures the outcomes (e.g., mortality rate, complication rate, infection rate, range of motion following rehab, etc.) that the hospital achieves for hip replacements on patients similar to Ms. Brown. It then adjusts the payment to the hospital up or down by a certain percentage based on whether its outcomes for Ms. Brown are above or below the standard it has established.

Ms. Brown will be responsible for paying for a portion of her care. The amount she pays will be lower if she selects a hospital that charges a price lower than the average of other hospitals in the area and/or with quality ratings above the average for the region for patients similar to her.

Ms. Brown receives a small rebate on her share of the costs of her care if she achieves the rehabilitation goals and complies with the post-discharge plan that she develops jointly with her physicians.
would receive for each type of patient and condition.

- Patients would receive incentives to use higher-quality/lower-cost providers and adhere to care processes jointly developed by them and their providers.

An example of how this system might work for an individual patient is described in the sidebar.

Why would this be better than current payment systems?

- Hospitals would have an incentive to prevent adverse events, prevent readmissions, and use the right combination of inpatient and post-acute care.

- Physicians would no longer be paid more for longer hospital stays, more procedures and adverse events.

- Physicians and hospitals would have an incentive to cooperate in optimizing care quality and cost.

- Providers would have the funding flexibility to use the best combination of facilities and services for maximum value.

- Patients would have an incentive to choose the facility and services that provide the best value (i.e., better quality and/or lower cost).

Examples of Episode-of-Care Payment Systems

Have episode-of-care systems ever been tried and do they work? Yes. In fact, partial versions have been used nationally for decades, and full versions have been tested in demonstration projects with successful results. For example:

- Medicare’s prospective payment system (the DRG system mentioned above) has paid hospitals on an episode-of-care basis for 25 years. Although this system does not go as far as bundling physician payments or post-acute care payments into the same payment as the hospital receives, it represents a major transformation from the previous cost-based reimbursement system for hospitals and resulted in significant improvements in both cost and quality for patient care.

- In 1987, an orthopedic surgeon in Lansing, Mich., collaborated with his principal hospital, Ingham Medical Center, to offer a fixed total price for surgical services for shoulder and knee problems. The price included a warranty for any subsequent services needed for a two-year period, including repeat visits, imaging, rehospitalization and additional surgery. A study found that the payer paid 40 percent less than it would have expected to pay otherwise, while the surgeon received over 80 percent more in payment than he would have otherwise expected. The savings for the payer were achieved by reducing unnecessary auxiliary services such as radiography and physical therapy, reducing the length of stay in the hospital and reducing complications and readmissions. The hospital actually received 13 percent more in payment for the cases it cared for than it would have otherwise, but the number of hospitalizations decreased.

- In the 1990s, Medicare’s Participating Heart Bypass Center Demonstration selected four hospitals in Ann Arbor, Mich.; Atlanta; Boston; and Columbus, Ohio, to receive a single payment covering both Part A (hospital) and Part B (physician) services for coronary artery bypass graft surgery. No outlier payments were permitted, and the amount of the combined payment was negotiated to be below current payment levels by between 10 percent and 37 percent, depending on the city. The hospital and physicians were
free to split the combined payment however they chose. An evaluation of the demonstration showed that the providers, patients and Medicare all benefited. Physicians identified ways to reduce length of stay and unnecessary hospital costs; costs decreased by 2 percent to 23 percent in nominal terms in three of four hospitals; even though post-acute care was not included, post-discharge outpatient expenses actually decreased; and patients preferred the single co-pay. 5

- Geisinger Health System in Pennsylvania, through its ProvenCare® system, provides a warranty that covers any follow-up care needed for avoidable complications within 90 days at no additional charge. The system is currently used for coronary artery bypass graft surgery, and there are plans to expand it to hip replacement, cataract surgery, angioplasty and other areas. 6

There are also some efforts today to implement more episode-of-care payment systems, including the following:

- The Centers for Medicare and Medicaid Services has announced a demonstration called the Acute Care Episode (ACE) Demonstration to begin in 2009. Under the demonstration, Medicare will pay a single amount to cover both hospital and physician services for either or both of two sets of services: cardiac care (CABGs, valves, defibrillators, pacemakers, etc.) and orthopedic care (hip and knee replacements). One hospital/care system will be selected in each market based on the price it bids and the quality approach it uses. Patients will pay lower copayments, and the selected hospital/care system will be expected to promote its selection and the opportunity for lower costs to patients in order to attract more patients. The demonstration is only open to hospitals and care systems in Texas, Oklahoma, New Mexico and Colorado. 7

- PROMETHEUS Payment, Inc. is currently developing an episode-of-care payment system that will cover the full episode of care and all providers for a variety of conditions. The amount of the payment will be based on a combination of historical actual costs and the estimated cost of delivering evidence-based care, with payment adjustments based on quality performance. The acute conditions being focused on initially include acute myocardial infarction (heart attack), hip and knee replacements, coronary artery bypass graft surgery (CABG), coronary revascularization, bariatric surgery, and hernias. 8

What a Condition-Specific Capitation System Might Look Like
Participants at the 2007 NRHI Healthcare Payment Reform Summit recommended the creation of a form of condition-specific capitation payment for the care of chronic disease patients and outlined many of the key elements that should be included:

- A periodic (e.g., monthly or quarterly) comprehensive care payment would be paid to a group of providers to cover all of the care management, preventive care and minor acute services associated with the patient’s chronic illnesses in place of all current fees for those services. Major acute care and long-term care would be paid separately.

- The amount of the comprehensive care payment would vary based on the patient’s characteristics—both the specific chronic illness they have and other factors affecting the level of health care services they will need.

- The set of services to be covered by the comprehensive care payment would be determined by a regional collaborative organization. The regional collaborative organization would also estimate the cost of providing those services for each type of patient, but provider groups would bid and
negotiate the actual comprehensive care payment they would receive.

- The provider group would receive payment bonuses or penalties based on (a) health outcomes for patients, (b) patient satisfaction levels and (c) patient utilization of major acute care services.

- Patients would receive incentives to use higher quality/lower-cost providers and adhere to care processes jointly developed by them and their providers.

An example of how this system might work for an individual patient is described in the sidebar. More details on the recommendations for payment for patients with chronic diseases from the 2007 NRHI summit are available in the report, Incentives for Excellence: Rebuilding the Healthcare Payment System from the Ground Up, published by the Jewish Healthcare Foundation and available at www.nrhi.org/summit.html.

Why would such a system be better?

- Physicians would no longer be restricted by fee codes and amounts as to what services they can provide and be paid for.

- Physicians would have an incentive to maintain or improve a patient’s health, prevent hospital admissions, and coordinate care among multiple providers.

- Physicians would have the funding flexibility to use the best combination of providers and services for maximum value.

- Patients would have an incentive to choose providers and services that provide the best value (i.e., better

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**How-Condition-Specific Capitation Would Work in a Hypothetical Case**

Mr. Jones has diabetes. His insurance company pays his primary care provider a monthly comprehensive care payment to help him manage his diabetes and address some of the complications that might arise from his condition.

Mr. Jones’ primary care provider has physicians, nurse practitioners and other staff working as a team to help Mr. Jones. In addition, they have relationships with other health care providers that will need to provide some aspects of Mr. Jones’ care, such as laboratories and ophthalmologists.

Mr. Jones’ primary care provider works with him to develop a plan of care that defines the actions that he can and will take (e.g., exercising, managing his diet, taking medications, etc.) as well as the actions that the provider will take (e.g., contacting him regularly by phone to see how he is doing, seeing him periodically to check his blood glucose and hemoglobin levels, checking his feet at every visit, etc.) in order to successfully manage his diabetes.

Mr. Jones understands that he does not need to see a doctor each time he comes to the office for checkups, since a nurse practitioner can perform all of the necessary checks and call in a physician when needed.

The costs of blood tests and any visits to specialists that Mr. Jones needs, such as periodic eye examinations by an ophthalmologist, are all paid by his primary care provider from the monthly comprehensive care payment.

Mr. Jones pays no co-payments for his regular checkups or routine testing. He receives a small cash payment from his insurance company if he meets the goals established in his care plan as measured by objective test results, such as hemoglobin A1c levels. His primary care provider also receives a financial bonus from the insurance company if Mr. Jones meets the goals in the care plan.

The insurance company measures the number of hospitalizations that occur related to diabetes for Mr. Jones and other patients like him who are under the care of the primary care provider. If the rate of hospitalizations is below a predetermined target level, the primary care provider receives a financial bonus, since they have saved the insurer money.

Mr. Jones is free to switch to another primary care provider at any time if he isn’t happy with the care he is receiving. However, if he switches to a provider that has significantly poorer outcomes, higher rates of hospitalizations, and/or higher prices for care, his insurance company will require him to pay more in order to use that provider.

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quality and/or lower cost) and to adhere to recommended care.

Examples of Condition-Specific Capitation Payment Systems
A variation of this model has existed in Minnesota for more than a decade through the Patient Choice system, which was first created under the auspices of the Buyers Health Care Action Group (BHcAG). (See www.patientchoicehealthcare.com.)

Under the Patient Choice model:

- “Care systems” (groups of providers, including both hospitals and physicians) bid on the risk-adjusted (total) cost of caring for a population of patients.
- The care systems are divided into cost/quality tiers based on their relative bids.
- Consumers pay the difference in the bid price to select a care system in a higher cost tier.
- Providers continue to bill based on fee-for-service codes, with the addition of new codes to cover previously unpaid services, but the fee levels that are actually paid are adjusted to keep total payments within a budget. The budget is based on the provider’s bid but is adjusted upward or downward based on the relative illness and other characteristics of the patients that the provider actually cares for. This prevents the provider from assuming insurance risk and makes them liable only for the performance risk component of their bid.

This system has encouraged patients to select more cost-effective providers and has encouraged providers to reduce their costs while maintaining or improving quality in order to attract more consumers.

There are also some efforts today to implement condition-specific capitation systems, including:

- The Alternative Quality Contract. Blue Cross Blue Shield of Massachusetts (www.bluecrossma.com) has developed an optional contract for providers called the Alternative Quality Contract (AQC). It makes a fixed payment per patient, adjusted by the health of the patient, to cover all care services delivered to the patient, as well as substantial performance incentives tied to the latest nationally accepted measures of quality, effectiveness and patient experience of care.

- PROMETHEUS. As noted earlier, PROMETHEUS Payment, Inc. is currently developing a new payment system designed to cover all care delivered by all providers for a particular condition. In addition to acute conditions, the PROMETHEUS payment model is being developed for chronic conditions, including diabetes, congestive heart failure, chronic obstructive pulmonary disease (COPD), asthma, coronary artery disease and hypertension. (See www.prometheuspayment.org for more details.)

Issues Involved in Moving From Volume-Driven to Value-Driven Health Care
Although these improved payment systems hold significant promise for improving the quality and cost of health care, there are a number of important issues that need to be addressed and a variety of challenges that need to be overcome in order to move them from concept to reality. Many of these issues and challenges stem from the number, diversity and complexity of organizations involved in health care. There are multiple payers, each with different payment methods and benefit structures, and a wide range of types of providers, all in-
interacting in complex ways to deliver health care services to patients, as shown in Figure 10.

As suggested by Figure 10, there are a number of key questions that must be addressed in designing and implementing new payment systems:

- Which health care providers, if any, are able and willing to accept new payment structures? If a large number of providers can and will accept and manage the payments effectively, then the new payment system can be successful. But if few or no providers can do so, then, as a practical matter, the payment system cannot be implemented or will likely not achieve the desired improvements in value.

- How should the use of high-value providers and services be encouraged? What protections are needed for patients?

- What actions should be taken to support and encourage payment reform initiatives? The key issues related to this question include how pilot projects should be designed, how much alignment of payers is necessary, how payers and providers can be encouraged to participate in new payment systems, and what community-wide structures are needed to support payment reform.

In most cases, definitive answers to these questions do not exist today, and there are debates in many areas about which approach is best. Different approaches may well be better in different regions of the country. Options and recommendations for addressing each of these issues are provided in NRHI’s comprehensive report, From Volume to Value: Transforming Healthcare Payment and Delivery Systems to Improve Quality and Reduce Costs, available at www.nrhi.org.

Endnotes
1. This paper is derived from the Framing Paper prepared for the Network for Regional Healthcare Improvement’s 2008 Summit on Healthcare Payment Reform by Harold D. Miller, available at www.nrhi.org/2008summit.html.


7. See the “Medicare Demonstrations” section at [www.cms.hhs.gov](http://www.cms.hhs.gov) for more details.


*We thank the Robert Wood Johnson Foundation for its support in developing this series.*