

**Payment
Reform
Series**

No. 3

**The Building Blocks of
Successful Payment Reform:
Designing Payment Systems that
Support Higher-Value Health Care**

Harold D. Miller
President and CEO
Center for Healthcare Quality and Payment Reform

April 2015

The Building Blocks of Successful Payment Reform: Designing Payment Systems that Support Higher-Value Health Care

The Network for Regional Health care Improvement (NRHI) is a national membership organization representing more than 30 Regional Health Improvement Collaboratives (RHICs). These multi-stakeholder organizations are working to achieve better health, better care, and lower costs in their communities. The NRHI Payment Reform Series will address a range of issues impacting multi-payer, multi-stakeholder efforts to change how care is paid for in regions and states across the country.

Contents

EXECUTIVE SUMMARY	i		
I. THE NEED FOR PAYMENT REFORM TO SUPPORT HIGHER-VALUE CARE	1		
II. CRITERIA FOR SUCCESSFUL PAYMENT REFORMS	4		
III. THE BUILDING BLOCKS OF PAYMENT REFORM	7		
Building Block 1: The Services Covered by a Single Payment	9		
Option 1–A: Adding New Service–Based Fees or Increasing Existing Fees	12		
Option 1–B: Treatment–Based Bundles (Single Provider)	13		
Option 1–C: Multi–Provider Treatment–Based Bundles	16		
Option 1–D: Condition–Based Payment	17		
Option 1–E: Population–Based Payment	19		
Option 1–F: Combination Payment Models	21		
Strengths and Limitations of the Different Options	22		
Compensating Providers for Services Delivered Under Bundled Payments	23		
Building Block 2: Mechanism for Controlling Utilization and Spending	26		
Option 2–A: Payment Adjustments (Pay for Performance) Based on Utilization	28		
Option 2–B: Payment Adjustments (Pay for Performance) Based on Spending or Savings	30		
Option 2–C: Bundled Payment	32		
Strengths and Limitations of the Different Options	34		
Building Block 3: Mechanism for Assuring Good Quality and Outcomes	36		
Option 3–A: Minimum Performance Standards	37		
Option 3–B: Payment Adjustments (Pay for Performance) Based on Quality/Outcomes	37		
Option 3–C: Warranted Payment	41		
Strengths and Limitations of the Different Options	43		
Building Block 4: Mechanism for Assuring Adequacy of Payment	44		
Option 4–A: Risk Adjustment and Stratification	49		
Option 4–B: Outlier Payments	51		
Option 4–C: Risk Corridors	52		
Option 4–D: Volume–Based Adjustments of Payments	53		
Option 4–E: Setting and Periodically Updating Payment Amounts to Match Costs	54		
Strengths of the Different Options	55		
IV. COMBINING THE BUILDING BLOCKS OF PAYMENT	56		
How Different Combinations of Options Can Achieve Similar Goals	56		
Example 1: Improving Chronic Disease Management in Primary Care	58		
Example 2: Improving Care of Patients with Knee Osteoarthritis	61		
V. TRANSITIONING TO BETTER CARE DELIVERY AND PAYMENT	64		
ENDNOTES			69

Executive Summary

Many physicians, hospitals, and other providers across the country are actively working to redesign the way they provide services in order to deliver higher value care and improve patients' health. However, they often find that the current fee-for-service payment system creates barriers to implementing or sustaining better approaches to health care delivery. Consequently, payment reforms must be an integral part of any strategy to create a higher-value health care system and a healthier population.

Criteria for Successful Health Care Payment Reforms

It is unrealistic to expect physicians, hospitals, and other health care providers, no matter how motivated they are, to provide higher value care, to improve quality or reduce spending if the payment system does not provide adequate financial support for their efforts. On the other hand, it is also unrealistic to expect that patients, businesses, or government will be willing to pay more or differently to overcome these barriers without assurances that the quality of care will be improved, spending will be lower, or both. In order to be successful from the perspective of patients, purchasers/payers, and providers, a payment reform needs to be explicitly designed to achieve four separate goals:

- 1. Sufficient Flexibility in Care Delivery.** The revised payment system should provide sufficient flexibility to enable providers to deliver care in a way that they believe will achieve high quality or outcomes in the most efficient way and to adjust care delivery to the unique needs of individual patients.
- 2. Appropriate Accountability for Spending.** The revised payment system should assure purchasers and payers that spending will:
 - decrease by the amount expected, if the principal goal of the change in care is to reduce spending without harming the quality of care; or
 - stay the same or increase by no more than the amount expected, if the principal goal of the change in care is to improve the quality of care or the outcomes for the patients.

The Building Blocks of Successful Payment Reform: Designing Payment Systems that Support Higher-Value Health Care

The payment system should hold providers accountable for utilization and spending they can control, but not for services or costs they cannot control or influence.

3. Appropriate Accountability for Quality. The revised payment system should assure purchasers and payers that the quality of care and/or outcomes for patients will:

- remain the same or improve, if the principal goal of the change in care is to reduce spending without harming the quality of care; or
- improve by the amount expected, if the principal goal of the change in care is to improve the quality of care or the outcomes for patients.

The payment system should hold providers accountable for quality and outcomes they can control, but not for aspects of quality and outcomes they cannot control or influence.

4. Adequacy of Payment. The size of the payments in the revised system should be adequate to cover the providers' costs of delivering the new approach to care at the levels of quality that are expected for the types of patients they see and at the levels of cost or efficiency that are feasible for them to achieve.

Building Blocks of Payment Reform

Each of the four goals defined in the previous section is addressed by one of four fundamental "Building Blocks" in a payment system:

- 1.** The definition of the services that will be covered by a single payment.
- 2.** The mechanism for controlling utilization and spending.
- 3.** The mechanism for ensuring good quality and outcomes.
- 4.** The mechanism for ensuring adequacy of payment.

No design for a payment system or a payment reform is complete until decisions are made about how all of the Building Blocks will be structured, and there are multiple ways to design each Building Block.

Building Block 1: Services Covered by a Single Payment

The more services that are covered by a single payment, the more flexibility a provider has to change the number and types of services they provide to their patients without resulting in financial losses. There are several different options for providing additional flexibility in payment:

Option 1–A: Adding new service–based fees or increasing existing fees.

Payment would be made for one or more specific services that are not currently eligible for payment or for specific circumstances in which current payments are inadequate.

Option 1–B: Creating a treatment–based bundled payment for a single provider. A single payment would be made for a group of existing or new services that a provider delivers as part of a particular type of treatment, with no change in payment based on which or how many services from the group are delivered.

Option 1–C: Creating a multi–provider treatment–based bundle. A single payment would be made for a group of services delivered by several different providers as part of a particular type of treatment.

Option 1–D: Creating a condition–based payment. A single payment would be made for addressing a particular health problem, with no difference in payment based on which particular approach to treatment is used.

Option 1–E: Creating a population–based payment. A single payment would be made for all of the services a provider or group of providers delivers to a group of patients for all of the health problems managed by those providers.

In multi–provider bundled payment structures, the less–bundled options (i.e., those with fewer services or providers included in the bundle) can be used as mechanisms for compensating individual providers. The payer would make a bundled payment to one of the providers or to an organizational entity formed by all of the providers. The entity receiving

the payment would then use those funds to pay the individual providers for the services they deliver to patients using a payment/compensation method that reduces or eliminates any barriers they would face to implementing the desired changes in care delivery.

Building Block 2: Mechanism for Controlling Utilization and Spending

There are three basic options for how accountability for utilization and spending can be incorporated into a payment system:

Option 2–A: Adjustments in payment (pay for performance) based on utilization. This would involve a) setting targets for the rates of utilization for specific services, and b) defining adjustments in payments to the provider based on achievement of the utilization targets. Only the utilization of the service would be measured, not the spending.

Option 2–B: Adjustments in payment (pay for performance) based on spending or savings. This would involve setting targets for spending on specific services and defining adjustments to payments based on achievement of the spending targets. This requires the provider to take accountability for the price of services as well as how many and which types of services are used.

Option 2–C: Bundled payment. The target amount of spending for specific services would be bundled into the provider’s payment, and the provider would then be responsible for covering any spending beyond the target amount.

The specific measures of utilization or spending used in these mechanisms will depend on which types of services are bundled into individual payments to the provider through Building Block 1. Bundling a larger number of services into a single payment not only provides greater flexibility but also requires providers to control more types of utilization and spending, reducing the need for separate payer-managed mechanisms for utilization/spending control.

Building Block 3: Mechanism for Assuring Adequate Quality and Outcomes

There are three basic approaches for how accountability for quality can be incorporated into a payment system:

Option 3–A: Establishing minimum performance standards. Under this approach, if the provider does not meet a minimum level of performance in delivering a service, there would be no payment, even if the service has already been delivered.

Option 3–B: Payment adjustments (pay for performance) based on quality. A quality-based pay for performance system would involve a) setting targets for performance on specific quality measures, and b) defining adjustments in payments to the provider based on achievement of the quality targets.

Option 3–C: Warrantied payment. If a provider offers a warranty on a service or bundle of services, the provider would be responsible for treating preventable complications or correcting quality problems that occur, with no additional payment from the payer. The total amount of payment for the service or bundle would be designed to cover the costs of preventing quality problems and correcting those that cannot be prevented.

The specific measures of quality used in these mechanisms will depend on which types of services are included in a single payment. The larger the range of services incorporated into a bundled payments, the greater the risk of underuse of services, increasing the need for quality measures to protect against underuse.

Building Block 4: Mechanisms for Assuring Adequacy of Payment

Greater flexibility in payment under Building Block 1 may make it easier to deliver a lower-cost mix of services that achieves better outcomes for patients than is possible under the current payment system. *Flexibility* is not sufficient, however; the amount of the payment must be *adequate* to cover the cost of the new mix of services. Before attempting to design a change in the payment system, a business case analysis should first

be conducted. A key part of this analysis is to project what costs will be under the new approach to care delivery. This analysis can then be used to determine the appropriate amount of payment needed to support the planned changes in care.

The payment system should also ensure that both the *amount* and *type* of financial risk for providers that would be required under the payment system can be successfully managed by the providers receiving the payments. An effective payment system should ensure that *payers retain insurance risk* (i.e., the risk of whether patients have health problems or more serious health problems) and that *providers accept performance risk* (i.e., the risk of whether care for a particular health problem is delivered efficiently and effectively).

There are several options for adjusting payments to ensure they are adequate to enable providers to deliver high quality care and to ensure that providers only take on performance risk and not insurance risk:

Option 4–A: Risk adjustment or risk stratification. A *risk adjustment* system increases or decreases the amount of payment for a bundle of services based on a risk score derived from characteristics of the patient that cause more or fewer services to be needed for that patient. *Risk stratification* defines two or more discrete levels of payment for a particular bundle of services based on different severities or combinations of patient characteristics.

Option 4–B: Outlier payments. An outlier payment is an additional payment made to a provider if an *individual patient* needs services that are significantly more expensive than the predefined amount of payment would cover.

Option 4–C: Risk corridors. In a risk corridor, the provider receives an additional payment if its total spending on *all of the patients* treated under a bundled payment exceeds the aggregate amount of payments it receives.

Option 4–D: Volume–based adjustments to payment. A volume–based adjustment increases the amount of payment for a service if fewer services are delivered or if the service is delivered

by a smaller provider, in order to address the fact that the average cost of delivering services will be higher with a lower volume of services if significant fixed costs are involved in the service.

Option 4–E: Setting and periodically updating payment amounts to match costs. The amounts paid for services or bundles of services are set and periodically evaluated and revised to ensure that they cover the costs of delivering those services.

Multiple options in Building Block 4 can and often should be used as part of a payment system, since each option addresses a somewhat different issue needed to ensure the adequacy of payment for a provider and the appropriate separation of insurance and performance risk. The greater the degree of bundling defined in Building Block 1, the more likely it is that multiple options from Building Block 4 will be needed.

Transitioning to Payment Reform

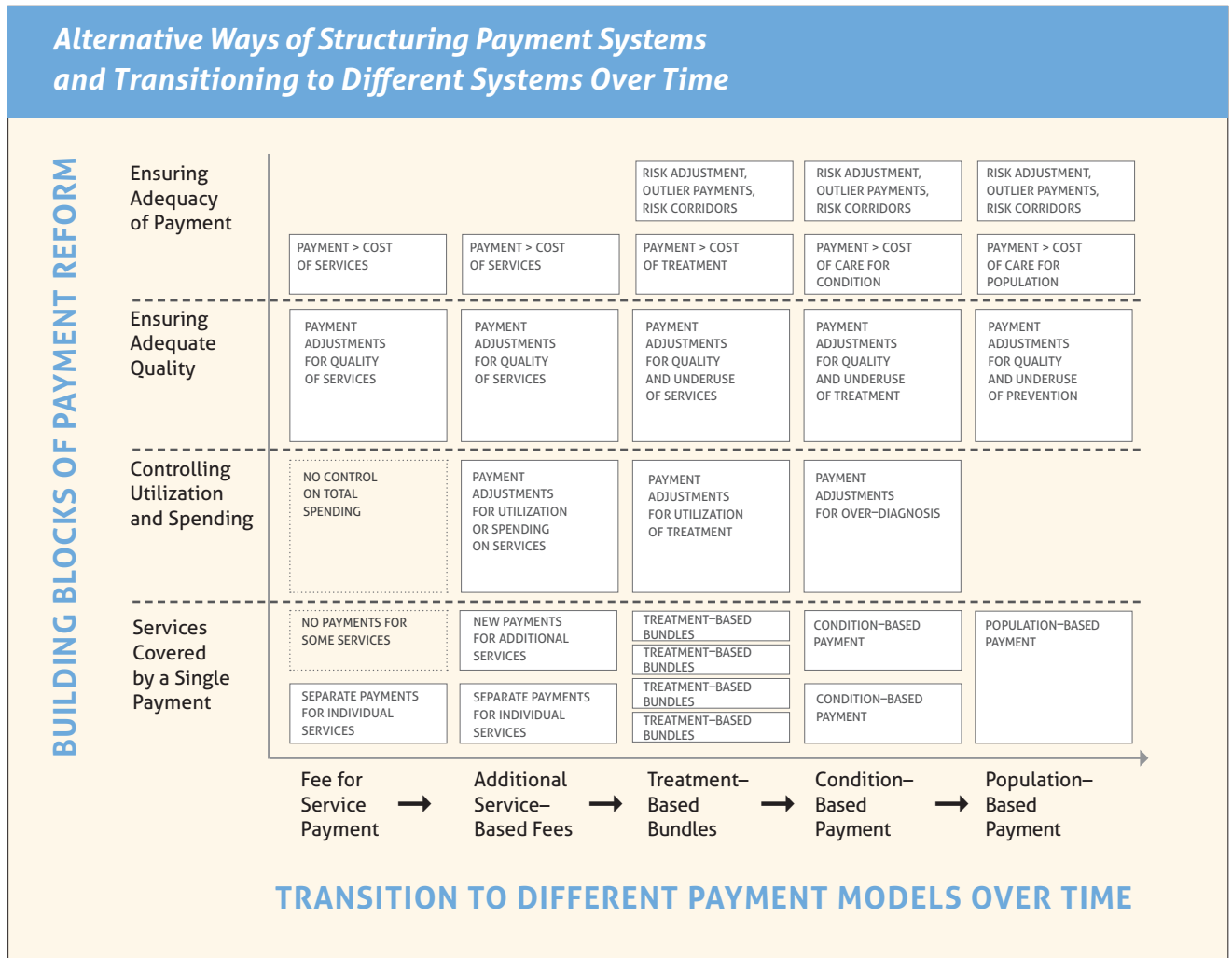
No one approach to payment reform will be best in every community. The opportunities to improve care will differ from community to community, providers will differ in their capabilities to manage under alternative payment systems, and payers will have different capabilities to implement changes in payment systems. The key is to ensure that if different payment systems are used to support a particular aspect of health care in a particular community, each payment system provides the necessary flexibility, accountability, and adequacy to enable providers to successfully provide high-quality care at an affordable cost. The different options for each building block provide the ability to customize a payment system to a specific approach to care delivery, to the capabilities of the providers who will be receiving the payment, to the needs and capabilities of the purchasers and payers who will be making the payments, and to the unique characteristics of the market in which the providers and payers are located.

In addition, the different options also provide a way to help providers and payers incrementally *transition* from the current fee for service system to better payment models over time. A provider and payer might start with more incremental changes, such as new fees for currently uncompensated

The Building Blocks of Successful Payment Reform: Designing Payment Systems that Support Higher-Value Health Care

services combined with targets for reducing avoidable services. Treatment-based bundles of services could then be implemented, followed by condition-based payments and ultimately population-based payments.

Providers and payers with greater capabilities to manage bundled payments and accountability mechanisms could move immediately to more advanced steps; other payers and providers could work to develop those capabilities while still paying and being paid in a way that overcomes the barriers to better care.



I. THE NEED FOR PAYMENT REFORM TO SUPPORT HIGHER-VALUE CARE

There are many significant opportunities to improve the quality and reduce the cost of health care. Many patients develop health problems that could have been prevented, receive tests and procedures that are unnecessary, are hospitalized because their health problems were not effectively managed, and experience complications and infections that could have been avoided. If these unnecessary and avoidable health problems and health care services could be eliminated, tens of billions of dollars could be saved and the quality of life for the patients would be improved¹.

Helping people stay healthy, improving the quality of health care services, and reducing spending on health care will require redesigning the way care is delivered. In general, more significant improvements in quality or spending will require more significant changes in care delivery. New types of services, innovative ways of delivering existing services, less costly settings for service delivery, and different combinations of services and providers will likely be needed.

Many physicians, hospitals, and other providers across the country are actively working to redesign the way they provide services in order to deliver higher value care. However, they often find that the current fee-for-service payment system creates two types of barriers to implementing or sustaining better approaches to health care delivery:

- **Lack of payment or inadequate payment for new or redesigned services.** For example, Medicare and most health plans don't pay physicians to respond to a patient phone call about a symptom or problem, even though those phone calls can avoid far more expensive visits to the emergency room. Medicare and most health plans won't pay primary care physicians and specialists to coordinate care by telephone or email, yet they will pay for duplicate tests and the problems caused by conflicting medications. A physician practice that organizes proactive outreach to high-risk patients, hires staff to provide patient education and self-management support, or uses non-health care services

The Building Blocks of Successful Payment Reform: Designing Payment Systems that Support Higher-Value Health Care

(such as transportation or housing) to help patients better manage their health care problems typically can't be reimbursed for the costs of these services, even if they help avoid expensive hospitalizations or allow diseases to be identified and treated earlier and less expensively.

- **Financial penalties for delivering a different mix of services.** Under the fee for service system, providers lose revenue if they perform fewer procedures or lower-cost procedures, but their costs for delivering the remaining services generally do not decrease proportionately, and that can cause operating losses for the providers. For example, as part of the Choosing Wisely campaign,² more than 60 medical specialty societies have made more than 300 recommendations for reducing the use of tests and procedures that may be unnecessary or harmful for patients, but in many cases, the physicians in these specialties will lose revenue by implementing the recommendations even though most of the savings will result from avoiding the use of tests, drugs, or medical devices, not from the lower payments to the physicians. Most fundamentally, under the fee for service system, providers don't get paid at all when their patients stay healthy and don't need health care services.

It is unrealistic to expect physicians, hospitals, and other health care providers, no matter how motivated they are to provide higher-value care, to improve quality or reduce spending if the payment system does not provide adequate financial support for their efforts. It is also unrealistic to expect that patients or payers will be willing to pay more or differently to overcome these barriers without assurances that the quality of care will be improved, spending will be lower, or both. Payment reforms are needed to support the delivery of higher-quality care for patients at lower costs for purchasers in ways that are financially feasible for providers.

It is unrealistic to expect physicians, hospitals, and other health care providers, no matter how motivated they are to provide higher-value care, to improve quality or reduce spending if the payment system does not provide adequate financial support for their efforts. On the other hand, it is also unrealistic to expect that patients or payers will be willing to pay more or differently to overcome these barriers without assurances that the quality of care will be improved, spending will be lower, or both. Payment systems must support the delivery of higher-quality care for patients at lower costs for purchasers in ways that are financially feasible for providers.

Consequently, the first step in any effort to change care delivery and/or payment is to establish that there is a *business case* for both providers and payers to do so.³ First, the costs of the new approach to care delivery need to be determined and compared to current costs. Then, the payments that would be received for the new set of services need to be compared to both current payments for the current services and the costs of the new services. The payments to the providers must exceed their costs of delivering the services in order for there to be a business case for them to make the change. If the payments are less than the costs, providers will need to be paid differently in order for the change in care delivery to proceed. If the payments needed to support the new approach to care delivery will be lower than current payments for current services, there will also be a business case for payers to make those changes. If total spending for payers would increase, however, there would need to be a sufficient improvement in the quality of care or outcomes for patients to convince payers that the increase in payment is justified, otherwise providers would need to further redesign the proposed care delivery to reduce spending or improve outcomes.

If there is a business case for improving the delivery of care, the payment system needs to be structured in a way that will support the care delivery approach in a way that is feasible for both providers and payers. This report defines a systematic way of designing payment reforms in health care to address the needs of providers, payers, and patients:

- Section II defines the four goals that must be achieved by a successful payment reform;
- Section III describes the four fundamental “Building Blocks” of a payment system and the different options for implementing each of those Building Blocks as part of a payment reform effort;
- Section IV illustrates how different approaches to payment reform, using different combinations of the options, can be used to achieve similar goals; and
- Section V describes how to implement payment reforms in ways that are feasible for providers and payers in different communities and how to transition to more flexible and accountable payment systems over time.

II. CRITERIA FOR SUCCESSFUL PAYMENT REFORMS

From a health care provider's⁴ perspective, the ability to change the way care is delivered in order to improve quality, reduce spending, or both requires that the payment system have two key characteristics:

- The method of payment needs to allow sufficient *flexibility to deliver care* in the way the provider believes will improve quality, reduce spending, or both.
- The amount of payment must be *adequate to cover the costs* of delivering the redesigned care.

From the perspective of purchasers, payers,⁵ and patients, however, a good payment system should have two somewhat different characteristics:

- The method of payment should ensure that patients receive the care they need at the *expected levels* of quality; and
- The amount of *payment should be no higher than necessary* to deliver high-quality services, and should result in the *expected amount of savings*, if any.

Although these different perspectives are not incompatible, they are not automatically aligned, either. A payment reform that a provider views as more desirable based on characteristics the provider cares most about may be seen as less desirable by purchasers, payers, and patients, and vice versa. For example:

- Purchasers and patients may be concerned that if providers have more flexibility as to the services that will be delivered in return for payment, patients will not receive all of the services they need. For example, traditional capitation payment systems give complete flexibility to providers as to what services to deliver, but in the past, some providers who have been paid through capitation systems have failed to deliver services that patients needed.
- Providers may feel that measures of appropriateness and quality defined by purchasers or payers will unfairly penalize them if they have patients with greater needs or unusual needs, and also that their ability to achieve high performance on these measures may require more or different services than the payment system supports.

The Building Blocks of Successful Payment Reform: Designing Payment Systems that Support Higher-Value Health Care

For example, a number of quality and utilization measures that are being used by payers have been criticized for failing to recognize that patients with low income, language barriers, functional limitations, etc. need additional services in order to achieve equivalent outcomes.

- Purchasers and payers may feel that they are paying too much for certain services or paying for unnecessary services, whereas providers may feel that in many cases, payments do not cover the costs of delivering quality care, and that they cannot control many aspects of utilization or spending for which payers want them to be accountable.

Consequently, if a change in the current payment system is being designed to overcome barriers providers are facing in delivering a new approach to care delivery, the change must also be designed in a way that assures purchasers, payers, and patients that the improvements in value that are expected from the care changes will actually be achieved. Similarly, if a change in the payment system is being designed by payers to encourage higher quality or lower spending, the payment system must also be designed in a way that gives providers the ability to redesign care to achieve that goal. In order to be successful from the perspective of *all* stakeholders—purchasers, payers, patients, and providers—a payment reform must be explicitly designed to achieve four separate goals:

- 1. Sufficient Flexibility in Care Delivery.** The revised payment system should be explicitly designed to provide sufficient flexibility to enable providers to deliver care in a way that will achieve high quality or outcomes in the most efficient way and to adjust care delivery to the unique needs of individual patients.

If a change in a payment system is being designed to overcome barriers providers are facing in delivering a new approach to care delivery, the change must also be designed in a way that assures purchasers, payers, and patients that the improvements in value that are expected from the care changes will actually be achieved. If a change in a payment system is being designed by payers to encourage higher quality and/or lower spending, the payment system must also be designed in a way that gives providers the ability to change care in ways that will achieve those results.

2. Appropriate Accountability for Spending. The revised payment system should be explicitly designed to assure purchasers and payers that spending will:

- decrease by the amount expected, if the principal goal of the change in care is to reduce spending without harming the quality of care; or
- stay the same or increase by no more than the amount expected, if the principal goal of the change in care is to improve the quality of care or the outcomes for the patients.

The payment system should hold providers accountable for utilization and spending they can control, but not for services or costs they cannot control or influence.

3. Appropriate Accountability for Quality. The revised payment system should be explicitly designed to assure purchasers and payers that the quality of care and/or outcomes for patients will:

- remain the same or improve, if the principal goal of the change in care is to reduce spending without harming the quality of care; or
- improve by the amount expected, if the principal goal of the change in care is to improve the quality of care or the outcomes for patients.

The payment system should hold providers accountable for quality and outcomes they can control, but not for aspects of quality or outcomes they cannot control or influence.

4. Adequacy of Payment. The size of the payments in the revised system should be explicitly designed to be adequate to cover the providers' costs of delivering the new approach to care at the levels of quality that are expected for the types of patients they see and at the levels of cost or efficiency that are feasible for them to achieve.

III. THE BUILDING BLOCKS OF PAYMENT REFORM

In general, a change in payment is unlikely to be successful in supporting or encouraging higher-value care unless it is *explicitly designed to address all four of the goals* defined in Section II, and all four goals usually cannot be addressed by a single change in a payment system. A change focused on only one goal may cause problems for achieving another goal or may fail to address the underlying barriers to achieving the desired goal. A combination of changes to different aspects of the payment system will generally be needed to achieve an appropriate balance of performance on all four goals that is acceptable to providers, purchasers/payers, and patients.

Incentives Alone Won't Work If Barriers Exist

For example, many payers have attempted to “incentivize” physicians, hospitals, and other health care providers to deliver higher-value care solely by creating rewards or penalties based on spending or quality, such as adding pay-for-performance or shared savings programs to the existing fee-for-service system. However, if providers are facing barriers in the fee-for-service payment system, such as no payment or inadequate payment for needed services, and if these barriers are not also addressed adequately by changes in the underlying fee-for-service payment structure, the providers may be unable to respond to the incentive programs in the way payers hope. Incentive programs have generally failed to achieve the desired result because in most cases, the problem in the current payment system is not a *lack of incentives* for quality or cost containment, but *structural barriers* that prevent providers from delivering higher-quality or more cost-effective care, such as lack of payment for new or redesigned services.

Many payers have attempted to “incentivize” physicians, hospitals, and other health care providers to deliver higher-value care solely by creating rewards or penalties based on spending or quality, such as pay-for-performance or shared savings programs, without making changes in the aspects of the underlying fee for service system that prevent providers from improving care, such as failing to pay or paying inadequately for the services patients need. As a result, these incentive programs have generally failed to achieve the desired result.

Flexibility Must Be Accompanied by Accountability

Conversely, many providers have sought greater flexibility in payment or higher payment amounts in order to deliver care in a higher quality or lower cost way, but the providers have been unwilling to accept accountability for ensuring that the changes in payment will, in fact, result in lower spending and/or higher quality. Purchasers and payers are understandably skeptical that without explicit accountability for spending or quality, providers may not make the difficult changes that are needed in order to eliminate waste and to address the reasons for inadequate performance on quality.

Past Performance is No Guarantee of Future Results (Unless Accountability is Built In)

Some purchasers and payers say they want to see “evidence” that a payment reform works before implementing it. This has led to a plethora of demonstration projects and expensive evaluation studies, often with conflicting or unclear results. However, an evaluation of a demonstration project, no matter how rigorous, is unlikely to accurately predict the impacts of a broadly implemented payment reform, particularly if the payment system does not explicitly hold providers accountable for achieving those results.⁶ Conversely, if the payment reform includes appropriate accountability components, then there is no need to evaluate it before implementing it, because it is explicitly designed to achieve the desired results. In many cases, the long delays in organizing and evaluating payment reform projects have slowed progress on payment reform rather than accelerating it, and significant resources have been spent on evaluation instead of on technical assistance that providers need to succeed under new payment systems or on making revisions to the payment system to address unexpected implementation problems.

Four Building Blocks for a Successful Payment System

In order to design a payment system to successfully address the four goals defined in Section II, four fundamental “Building Blocks” must be included:

1. The definition of the services that will be covered by a single payment.
2. The mechanism for controlling utilization and spending.
3. The mechanism for ensuring good quality and outcomes.
4. The mechanism for ensuring adequacy of payment.

No design for a payment system or a payment reform is complete until decisions are made about how all of the Building Blocks will be structured. It may be that no change in a particular Building Block is needed if there is no barrier there currently and if the changes made in other Building Blocks do not create new types of barriers; however, this needs to be determined *explicitly*, rather than simply assuming that no changes are needed or assuming that results achieved in the past will automatically persist in the future.

There are multiple ways that each of the Building Blocks can be structured. This section will describe the major options that exist for each Building Block and some of the strengths and weaknesses of each. Section IV will then show how the different options for the four Building Blocks can be combined to provide appropriate support for specific changes in care delivery.

Building Block 1: The Services Covered by a Single Payment

The fee-for-service system might seem to be the most flexible payment system possible since there are thousands of different billing codes for individual services that are payable under typical fee-for-service systems. Moreover, under most types of health insurance, providers generally have considerable flexibility to determine which of those services are delivered to patients and how many of those services the patients will receive.

However, as a practical matter, the fee-for-service system can be very inflexible where it matters. As discussed in Section I, even though thousands of services are paid for, there are many types of services that are increasingly recognized as important for patient care but are not paid for by Medicare or health plans under the fee for service system, such as hiring non-physician staff to help patients manage their health problems or addressing a patient problem over the telephone.

As a result, if physicians, hospitals, or other providers want to be paid, they are limited to delivering the services for which payers have agreed

to pay. For example, if a physician feels that a phone call with a patient would address a problem more effectively and at lower cost than asking the patient to come to the office, the physician will not get paid for the phone call but will only get paid if the patient comes to the office to see the physician in person.

The problem is not just that some desirable services are not paid for, but that delivering those services requires resources that would otherwise be used to deliver services that *are* paid for. For example, if a physician spends more time delivering unpaid services, there will be less time available for services that are paid for, such as office visits with patients, which in turn means that total revenues to the physician practice will decrease. Under the current fee-for-service system, the payments for physician services in office-based settings must cover not only the physician's time, but all of the other costs of the practice (the office space, equipment, and non-physician staff), so a physician practice can be bankrupted if not enough billable services are delivered by physicians to cover the operating costs of the practice.

Even for services for which payment is made, there are precise definitions as to how the service must be delivered in order to qualify for payment, and if the provider does things differently, they may be denied payment. For example, even if a physician feels that extra time is needed during an office visit to accurately diagnose the causes of her patient's symptoms, she may not be able to be paid for the extra time unless she can document that she met the specific criteria for a higher-level office visit under the fee-for-service system. Spending more time in office visits without additional compensation means that fewer office visits can be delivered, reducing total revenues even though operating costs would stay the same.

There are several options for defining the services covered by a single payment that can give greater flexibility to providers to change the number and types of services they provide to their patients without resulting in financial losses.

Option 1–A: Adding new service-based fees or increasing existing fees

Option 1–B: Creating a treatment-based bundled payment for a single provider

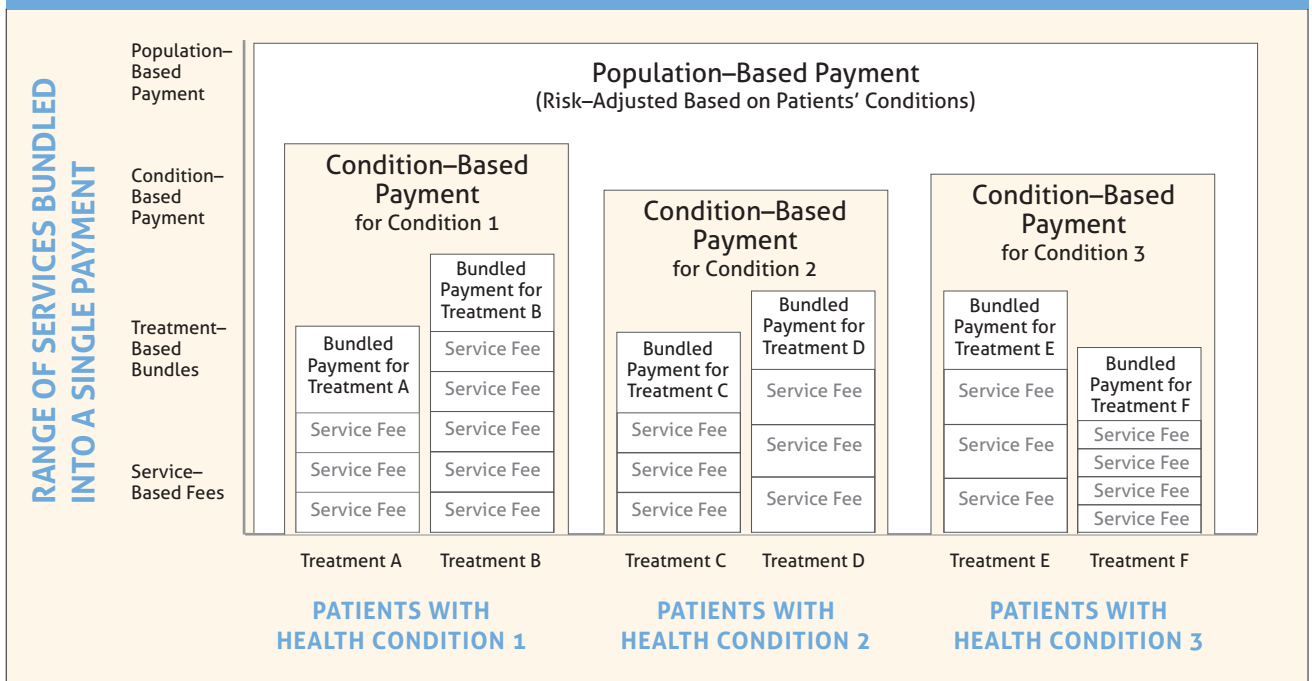
Option 1–C: Creating a multi–provider treatment–based bundle

Option 1–D: Creating a condition–based payment

Option 1–E: Creating a population–based payment

As illustrated in Figure 1, each successive option includes more types or numbers of services in a single payment amount, i.e., it represents a “bigger bundle.” This does not mean that more services *must* be delivered in return for payment; rather, it means that the same payment is made regardless of which services are delivered or how many services are delivered (within the range of services defined for the bundle). This gives the provider flexibility as to which services to deliver or how many to deliver without concern for how those decisions will affect the amount of payment, but it also means the provider must accept accountability for ensuring that the total cost of all of the services delivered stays within the payment amount, rather than assuming that delivering more services will result in higher payment.

Figure 1. Different Levels Of Bundling In Payment



Payment options with a higher level of bundling (i.e., a broader range of services are included) create greater flexibility in the ways care can be delivered, but they also represent more significant changes from the current payment system and so they create greater uncertainty and different implementation challenges for both providers and payers. The right approach depends on the nature of the changes in care delivery that providers want to implement and the types of barriers to those changes that the current payment system creates. A small change in care delivery may only require a small change in the payment system, but the more dramatic the change in care delivery and the greater the variation in how services must be delivered to address individual patient needs, the bigger the change in the payment system that will likely be needed to provide adequate flexibility in care delivery.

Option 1–A: Adding New Service–Based Fees or Increasing Existing Fees

If the barrier to redesigning care is simply that a provider cannot be paid for a new or different service under the current payment system, then one solution is for payers to authorize payment for that specific service. If there is already a billing code defined for the service, then all that is needed is for payers to agree to pay providers for that billing code; otherwise, a new billing code and a definition of the associated service will need to be developed. For example, billing codes exist for telephone calls between physicians and patients, but they are not currently eligible for payment under Medicare.

In some cases, there may already be a billing code and payment for the service, but the problem is that the amount of payment is less than the cost of delivering the service in specific situations. In this case, a new billing code (or a modifier to an existing code) could be developed so that higher payments could be made in the situations in which the cost is higher. For example, the original Medicare Diagnosis Related Group (DRG) payment structure was changed to the MS–DRG structure in order to replace many of the previous DRG codes with multiple codes that better differentiate between patients with different numbers and types of health problems.

Concerns about whether a newly billable service will be delivered more frequently than necessary can be addressed through Building Block 2 (mechanisms for controlling utilization and spending).

Option 1–B: Treatment–Based Bundles (Single Provider)

Adding a new service–based fee requires defining what the service is, how much the payment for it should be, and for which patients and in which circumstances payment will be made for the service. The more specific the definition of a service, the more limited will be the flexibility for providers to deliver the service in different ways. If multiple new services are to be offered, if the new services would substitute for existing services, or if different combinations of services are going to be used for different patients, this could become very complex and potentially result in higher spending than necessary.

An alternative is to pay for a single treatment “bundle” instead of paying separately for individual services. The provider would receive the same payment regardless of which combination of services is delivered, and the provider thereby has the flexibility to determine which specific services will be delivered as part of the bundle, including services that were not paid for as separate services. The bundle could be small, combining only a few services into a bundle, or large, combining a wide range of services into a bundle. The payment amount for the bundle could be less than what is being spent on the existing services if the flexibility allows a lower–cost combination of services.

For example, the Bundled Payment for Care Improvement program⁷ being implemented on a demonstration basis by the Centers for Medicare and Medicaid Services allows providers to choose different levels of bundling for care of patients who are admitted to the hospital:

- In one bundled payment option, a single payment is made for a bundle that includes the initial hospitalization, physician services that occur during the hospitalization or afterward, post–acute care services, and any hospital readmissions occurring within a fixed period of time following the discharge from the hospital;
- In another bundled payment option, a single payment is made for a bundle that includes post–acute care services, physician services

delivered after discharge, and hospital readmissions, but *not* the services delivered during the initial hospitalization; the latter would continue to be paid for separately using the current fee-for-service payment system.

While bundled payment may seem as though it represents a radically different approach to payment than the traditional fee-for-service structure, most things that are paid for under fee-for-service represent a bundle of some kind, even if it is a very small bundle. For example, an office visit with a physician is typically paid for as an Evaluation and Management (E&M) Service, and an E&M payment is intended to cover several different activities during the visit and also some activities that occur before and after the visit. Surgeons have been paid for many years using a “global fee” that not only covers all aspects of surgery but also multiple follow-up visits with patients. Large hospitals have been paid by Medicare for inpatient care using bundled payments (the Diagnosis Related Group system) since 1983, and hospitals have been paid for outpatient services using bundled payments (the Outpatient Prospective Payment System) since 2000. Consequently, defining a treatment-based bundle is really just an expansion of an approach that is already widely used, not a completely new approach to payment.

Bundling New Services vs. Existing Services

A new treatment-based bundle might be defined to *only* include services that are *not* currently paid for separately, or it could be defined to include some services that *are* currently paid for as well as some that are not, particularly if the expectation is that existing services will be replaced by the new or different services in some circumstances. If existing services that are currently paid for individually will be included in the bundle, then it will also be necessary to define whether the bundle *replaces* payment for those existing services in *all* cases (i.e., a provider would no longer be able to bill separately for the existing service) or only *some* cases. In the latter situation, it will be necessary to define when the existing services can and cannot be billed separately from the bundle in order to ensure there is not double-billing for the same service.⁸

Acute Care Bundles vs. Chronic Care Bundles

For acute conditions where treatment is typically completed within a relatively short period of time, a treatment-based bundle could be defined to include all of the services that occur during the “episode” of acute care, i.e., from the beginning to the end of treatment and then for a specific period of time after treatment ends during which follow-up monitoring is needed or when complications may occur. For example, treatment bundles for knee surgery are commonly being defined to include all services during the hospitalization for surgery and any services related to the surgery that occur within a 30–90 day period after discharge.

If treatment occurs over a long period of time, such as with care of chronic conditions, it is generally necessary to define a treatment bundle using an arbitrary period of time, such as a month or a year. This facilitates accounting when a patient changes health insurance plans or changes providers during treatment. Since the treatment for the condition will need to continue past the end of the bundling period, a new treatment bundle would be initiated immediately following the end of the previous one, but the new bundle could be delivered by a different provider or be paid for by a different payer. For example, Medicare is now going to pay for care coordination services for patients with multiple chronic diseases on a monthly basis. Although the patient may receive care coordination services over a multi-month or multi-year period, a physician practice can only bill for the service a month at a time, so if a patient changes physician practices, a different physician practice would receive the payment, and if the patient switches to a Medicare Advantage plan, that plan would be responsible for paying for additional months of services.

Setting the Payment Level for the Treatment Bundle

A decision will also need to be made as to the appropriate payment level for the new bundle and whether the amount of payment should vary based on quality, patient acuity, etc. These issues are addressed through Building Blocks 3 and 4 (ensuring quality and ensuring adequacy of payment). Concerns about whether the treatment-based bundle will be used more frequently than necessary can be addressed through Building Block 2 (controlling utilization and spending).

Billing for the Treatment Bundle

Treatment-based bundles can be paid within existing claims payment systems simply by defining a billing code for the bundle. Instead of billing for the individual services, the provider would bill for the bundle using the new code, and the payer would pay the provider the amount associated with that code. As noted earlier, the payer will need a mechanism to ensure that payments are not made for the individual services in addition to the bundle that includes those services.

Option 1–C: Multi-Provider Treatment-Based Bundles

If the delivery of treatment involves services by multiple providers, then the bundle could encompass services delivered by those providers. Including multiple providers in a treatment bundle creates the flexibility to use different combinations of providers to deliver a service, but it also requires two additional sets of decisions:

- i. The *recipient* of the bundled payment must be defined. Three options for this are:
 - a. one provider could accept the bundled payment and then allocate the payment among itself and the other providers;
 - b. the payment could be made to a separate organizational entity controlled by all of the participating providers, and that organization would then allocate the payment among all of the participants; or
 - c. the payer could allocate the bundle among the participating providers according to a mechanism defined by or agreed to by those providers.
- ii. The providers who are included in the bundle need to have a method of *dividing* the bundled payment amongst themselves.

If the services included in the bundle *could* be delivered by multiple providers but those providers are *not* all included in the bundle, it will be necessary to define when other providers can and cannot bill for services separately from the providers who are included in the bundle and whether and how the bundled payment will be adjusted for that in order to ensure there is not double-billing for the same service and to ensure that other providers who deliver services are paid appropriately.

Option 1–D: Condition–Based Payment

Bundled services have most commonly been defined around a specific type of *treatment* for a particular health problem (e.g., a bundle for surgery to treat a problem vs. a bundle for non–surgical treatment of the same problem) and even based on a particular location where treatment is delivered (e.g., a bundle for a procedure delivered in a hospital vs. a bundle for the same procedure delivered in an ambulatory surgery center or a physician’s office). This is similar to how most fee–for–service payments are defined today.

However, if there are multiple ways to treat a particular health condition, an alternative is to define the bundle based on *the patient’s health condition* that is being addressed rather than a *specific form of treatment*. A “condition–based payment” is a bundled payment that gives the provider or providers who are involved the flexibility to use different types of treatment or different treatment settings as well as the flexibility to use different combinations of providers and services to achieve the best outcomes for care of the condition⁹ (a “condition” could be defined as multiple diseases or health problems if they need to be treated in a coordinated way). For example, many of the Diagnosis Related Groups (DRGs) that are used to pay hospitals under Medicare are defined primarily based on the patient’s primary diagnosis and comorbidities, rather than the specific services or treatments they receive while in the hospital.

A condition–based payment requires a way to define whether a patient has the particular condition to which the payment applies. In addition, if the services or treatments used for the condition can also be used to treat other conditions, it will be necessary to define when a service or treatment is or is not being used for the condition covered by the condition–based payment in order to avoid double–billing for the same service or treatment.¹⁰

A condition–based payment could be limited to a particular set of services/ treatments delivered by a single provider or could include a broader range of services delivered by multiple providers. For example, one

condition-based payment could be defined to include only radiation oncology services for a particular type of cancer (with the same payment made regardless of which particular type of radiation oncology treatment was used) and a separate condition-based payment could be defined to include medical oncology services for that same type of cancer (with the same payment made regardless of which type of chemotherapy was used). Alternatively, a single condition-based payment could be defined to include all types of treatment (both radiation and chemotherapy) for that particular cancer. In each case, though, the condition-based payment would be the same regardless of which specific type of treatment was used within the range of treatment options that are defined as being included in the bundle (the payment would be higher if the patient had a more severe condition that required more services or more expensive services, but the payment would not be higher simply because more services were used).

As with treatment-based bundles, a condition-based payment can be implemented within existing claims payment systems simply by defining a billing code for the condition-based payment. Instead of billing for individual services or treatment bundles, the provider would determine that the patient has the relevant condition and bill for payment using the new condition-based payment code, and the payer would pay the provider the amount associated with that code. For an acute condition, one payment could be made for an entire course of treatment for the condition (but independent of the particular treatment selected), whereas for a chronic condition, the condition-based payment could be paid on a monthly, quarterly, or annual basis, since some treatment will be needed on an ongoing basis.¹¹

Identifying the Accountable Provider

If two or more different providers can provide treatments to a patient for the same condition, a method will be needed to determine which provider should receive the condition-based payment and whether/how the other providers should be paid. This can be done in one of two ways:

- **Prospective designation.** Ideally, the patient will designate which provider is “in charge” of care for their condition before care begins, so the provider knows how they will be paid and what they are

accountable for delivering. The patient (and payer) will also know how much they are paying to whom for what. Patients could still have the ability to change care providers from time to time, as long as at any point in time, it is clear to the provider and the payer which provider will receive payment and whether the current or former provider is accountable for specific services, costs, and quality issues. For example, Medicare now pays a physician for “chronic care management” if the physician obtains explicit written agreement from the patient that they want to have the service provided and informs the patient that only one practitioner can furnish and be paid for the services covered by that payment during a calendar month.

- **Retrospective attribution.** An alternative that Medicare and other payers have tried to use is to declare which provider should receive a payment (or adjustments to payment) based on statistical calculations made after all of the care for the condition has been delivered (or after a specific period of time has elapsed). For example, a commonly-used rule is to assign or “attribute” the payment and the accountability for costs and quality to the provider who delivered the majority of services related to the condition among all of the services the patient received. There are serious problems with this approach, however:¹²
 - The provider who is attributed accountability may have had no ability to influence the quality or cost of the services the other providers delivered. Alternatively, the attributed provider may have been able to influence the other providers, but only if the provider had known in advance it would have that responsibility, rather than finding out after all of the other services had already been delivered.
 - The provider who actually was managing the patient’s care may not have delivered the necessary share of total services to be assigned accountability under the attribution formula.

Option 1–E: Population–Based Payment

The most flexible payment of all is a population–based payment, i.e., a single per–patient payment to a provider or group of providers for

The Building Blocks of Successful Payment Reform: Designing Payment Systems that Support Higher-Value Health Care

delivering a broad range of services for multiple health conditions that a group of patients may experience. All of the same issues discussed under the previous options would need to be addressed here, i.e., definitions are needed as to which services are included and not included, who would receive the payment if multiple providers are involved, what period of time will be covered by the payment, etc. In addition, there would need to be a way of adjusting the amount of the payment based on the types of health needs of the patients the provider is serving, otherwise the provider would be penalized financially for taking on patients with more health conditions or more serious conditions and trying to address their needs within the same amount of payment as a provider who is caring for a lower-acuity patient population; this issue is addressed under Building Block 4.

A population-based payment could be a “global payment,” in the sense that the provider receiving the payment would be expected to provide or arrange for the provision of *every* service that the patient needs for any condition, or it could be a “partial global payment” that covers a more limited set of services that the provider delivers or can manage. For example, some primary care practices are currently paid by payers using a population-based payment approach (commonly called “practice capitation”) just for the services that the practice itself provides, but not for services delivered by specialists, hospitals, etc. The primary care practice receives a monthly payment for each patient and the payment does not vary depending on how many office visits or other services the patient receives. There are also a number of physician groups that are paid with “professional services capitation,” which is a population-based payment that covers all physician services and many outpatient procedures, but not inpatient hospital services (inpatient care is then paid for separately, either through fee-for-service payments or a separate bundled approach).

However, if all services are not included in the population-based payment bundle, it will be necessary to define a separate accountability mechanism for the excluded services using one of the mechanisms in Building Block 2, otherwise there will be a financial incentive for the provider who is receiving the population-based payment to encourage patients to use

services that are not covered by the population-based payment instead of services that are. For example, if a primary care practice is paid on a per-patient basis rather than on a per-visit basis, but only for services delivered by the primary care practice itself, there would be a financial incentive for the practice to encourage patients to seek care from hospital emergency rooms or specialists even if the practice could have addressed the patient's need itself.

Option 1–F: Combination Payment Models

It is also possible to pay for services using a combination of the previous five options. For example:

- In some payment systems designed to support the patient-centered medical home, a primary care practice continues to be paid for some or all individual services on a fee-for-service basis but also receives a population-based payment that is intended to cover a range of other services and activities that cannot be billed separately for individual service-based fees. The population-based payment component provides more flexible and predictable revenues than the payments for individual services, but the payments for individual services ensure that the revenues to the practice still depend on how many services the patients receive, thereby encouraging the practice to see patients and respond promptly to acute needs.
- A condition-based payment could be made to a provider to manage a patient's condition, but if the patient needed a particular treatment that the provider did not deliver or that cost significantly more than other treatment options, a supplemental treatment-based bundle could be paid for that particular type of treatment.

As will be discussed further under Building Block 4, combination models can provide a better way for payers to match their payments to a provider's fixed/variable cost structure in delivering particular types of services.

Strengths and Limitations of the Different Options

Each of the different options has different strengths and limitations, as described in Table 1. It is likely that no one option will be best for all providers, payers, or patients.

Table 1. Strengths and Limitations of Different Approaches to Bundling Payments

Options for Payment	Strengths	Limitations
1-A: Adding Additional Service-Based Fees or Increasing Existing Fees	<ul style="list-style-type: none"> Enables additional payment to be focused specifically on a service that is not currently paid for or that is not paid for adequately Provides more payment if more services are needed 	<ul style="list-style-type: none"> Requires creating new billing codes, definitions, and/or payment amounts for each individual service The definition of the service may limit the flexibility to deliver it in different ways Does not directly control overuse of services in delivering treatment
1-B: Treatment-Based Bundles (Single Provider)	<ul style="list-style-type: none"> Provides flexibility to determine which specific services are used to deliver treatment Controls overuse of individual services Makes the total payment for treatment more predictable 	<ul style="list-style-type: none"> Payment may be higher or lower than needed for treatment of individual patients Does not directly protect the patient from receiving fewer services than necessary for adequate treatment Does not control the number of separate treatments performed
1-C: Multi-Provider Treatment Bundles	<ul style="list-style-type: none"> Provides flexibility to use different combinations of providers as well as services 	<ul style="list-style-type: none"> Requires designation of one provider or creation of a new entity to receive payment Requires providers to determine how to divide up the payment
1-D: Condition-Based Payment	<ul style="list-style-type: none"> Provides flexibility to determine which treatment is used or whether treatment is needed at all Controls overuse of treatments as well as individual services Makes the total payment for management of a condition more predictable 	<ul style="list-style-type: none"> Payment may be higher or lower than needed for care of a particular patient's condition Does not directly protect the patient from under-treatment of a condition Requires objective definition for presence of the triggering condition
1-E: Population-Based Payment	<ul style="list-style-type: none"> Provides flexibility to determine how best to manage multiple conditions Controls over-diagnosis of health care problems and overuse of treatments and services Rewards efforts to slow development of health conditions 	<ul style="list-style-type: none"> Payment may be higher or lower than needed for care of a group of patients Does not directly ensure that patients will receive appropriate treatment or preventive care services designed to achieve outcomes beyond the term of the payment contract
1-F: Combination of Payments	<ul style="list-style-type: none"> Can better match payments to cost and balance incentives 	<ul style="list-style-type: none"> Requires additional complexity to design and implement multiple payment approaches

Compensating Providers for Services Delivered Under Bundled Payments

If multi-provider payment bundles are used (whether the payment is made for specific treatments, specific conditions, or on a population basis), then a method will be necessary for dividing the payment among the participating providers. If the individual physicians and other providers who are delivering services associated with a treatment or condition are paid for their services using traditional fee-for-service methods, the barriers to changing care that prompted creation of the treatment bundle or condition-based payment will still exist, but the barriers will now stem from the way the recipient of the bundled payment is compensating the individual providers rather than the way the third-party payer is paying them.

To address this, the less-bundled payment options in this section (i.e., those with fewer services or providers included) can be used as mechanisms for compensating individual providers participating in more-bundled payment options, as illustrated in Figure 2. The payer would make a bundled payment to one of the providers or to an organizational entity formed by all of the providers, and the entity receiving the payment would use those funds to pay the individual providers for the services they provide using a method that reduces or eliminates any barriers they would face in implementing the desired changes in care delivery. For example:

- The payment for a treatment bundle could be divided up among the individual providers involved based on the services they deliver. If the providers deliver services that are not currently paid under fee-for-service, payment amounts for those services could be defined by the entity receiving the payment, and if current fee-for-service payment amounts are inadequate to cover the costs of delivering important services, higher payments could be made for those services from the treatment bundle. (The payment amounts for the individual services can be defined by the providers, not the payer, since the payer is responsible for paying the overall treatment bundle amount, and the providers then have flexibility

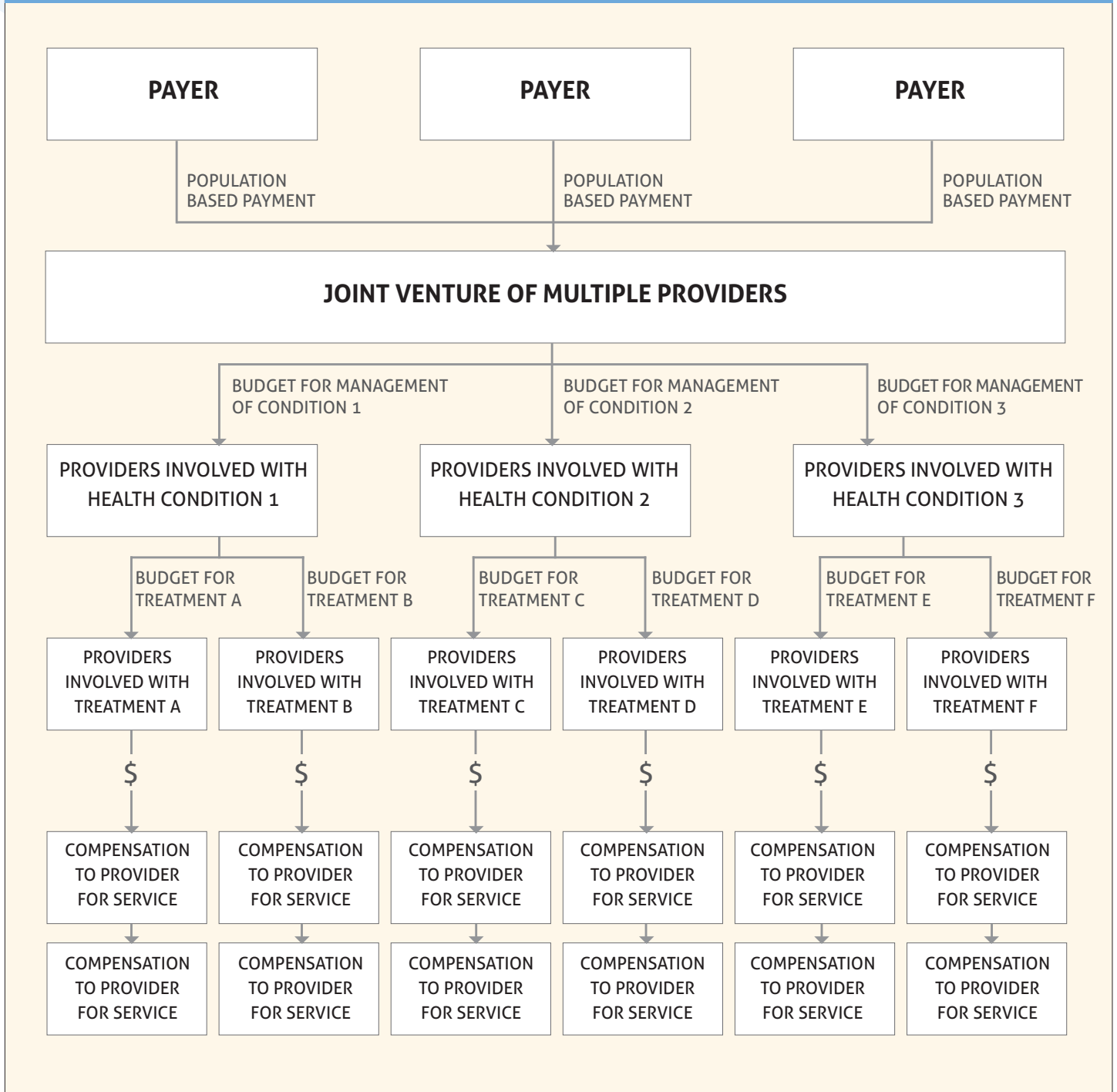
The Building Blocks of Successful Payment Reform: Designing Payment Systems that Support Higher-Value Health Care

as to how to allocate that payment among the services that each delivers.) For example, if an orthopedic surgeon and a physiatrist collaborate to accept a bundled payment for both joint surgery and the rehabilitation services following surgery, the two physicians could agree on which aspects of the overall services for surgery and rehabilitation would be the responsibility of each physician and how much those services would be expected to cost, and then they could divide the bundled payment based on how well each managed their portion of the overall costs.

- A condition-based payment could be divided up into treatment-based budgets based on which treatments were actually delivered, and then the providers involved in each treatment could determine how to divide up the treatment budgets among themselves. For example, a cardiologist might accept a condition-based payment for managing the overall diagnosis and treatment of patients with stable angina, and the cardiologist could then make an arrangement with an interventional cardiologist and hospital to accept a bundled treatment payment when a patient needed a cardiac catheterization. The interventional cardiologist and hospital could then determine how to divide the bundled payments for cardiac catheterizations.
- A population-based payment could be divided into condition-based budgets which would then be allocated to the providers managing each type of condition. The providers managing a particular health condition could then divide the condition-based budget for that condition into treatment budgets for individual treatments, etc. For example a primary care practice might accept a global payment for managing the overall care of a group of patients; the practice could then contract with a cardiology group to manage diagnosis and treatment of the subset of patients with stable angina and contract with an orthopedic surgery group to manage the care of patients with knee osteoarthritis.

Analogous changes need to be made for physicians and other health care professionals who are employed by a physician group, hospital, or health system. Most employed physicians do not receive a flat salary, but are paid based in part on their “productivity,” and productivity is usually

Figure 2. Using Bundled Payment Options for Compensation Within Larger Bundles



measured using traditional fee-for-service structures (e.g., “work RVUs”). This typically means that the compensation structure for the physicians creates barriers to change similar to those in the fee-for-service system that is used to pay the physicians’ employer.¹³ If changes are made in the way the employing organization is paid in order to remove the barriers that exist in the payment system, then the compensation structure for physicians and other providers who are employed by the organization also needs to change in parallel ways. This can be done by using the *payment* options defined in this section as *compensation* structures for the employed physicians. For example, a health system could accept a condition-based payment from a payer for managing a particular condition, and then the health system could adjust the salaries for the physicians involved in managing the condition using measures of whether spending for treating the patients with the condition remained within the budget, whether utilization and quality measures were achieved, etc.

If changes are made in the way a health care organization is paid in order to remove the barriers that exist in the payment system, then the compensation structure for the providers employed by the organization also needs to change in parallel ways. This can be done by using new payment models as compensation structures.

Building Block 2: Mechanism for Controlling Utilization and Spending

If one of the goals of providing higher payment or greater flexibility in payment to a provider is to reduce overall health care spending, the purchaser or payer will want accountability from the provider that spending will, in fact, be reduced. Even if there is agreement that spending should increase in order to improve quality or outcomes, the purchaser or payer will likely want the provider to take accountability for ensuring spending will only increase by the expected amount.

The Building Blocks of Successful Payment Reform: Designing Payment Systems that Support Higher-Value Health Care

There are several different options for how accountability for utilization and spending can be incorporated into a payment system:

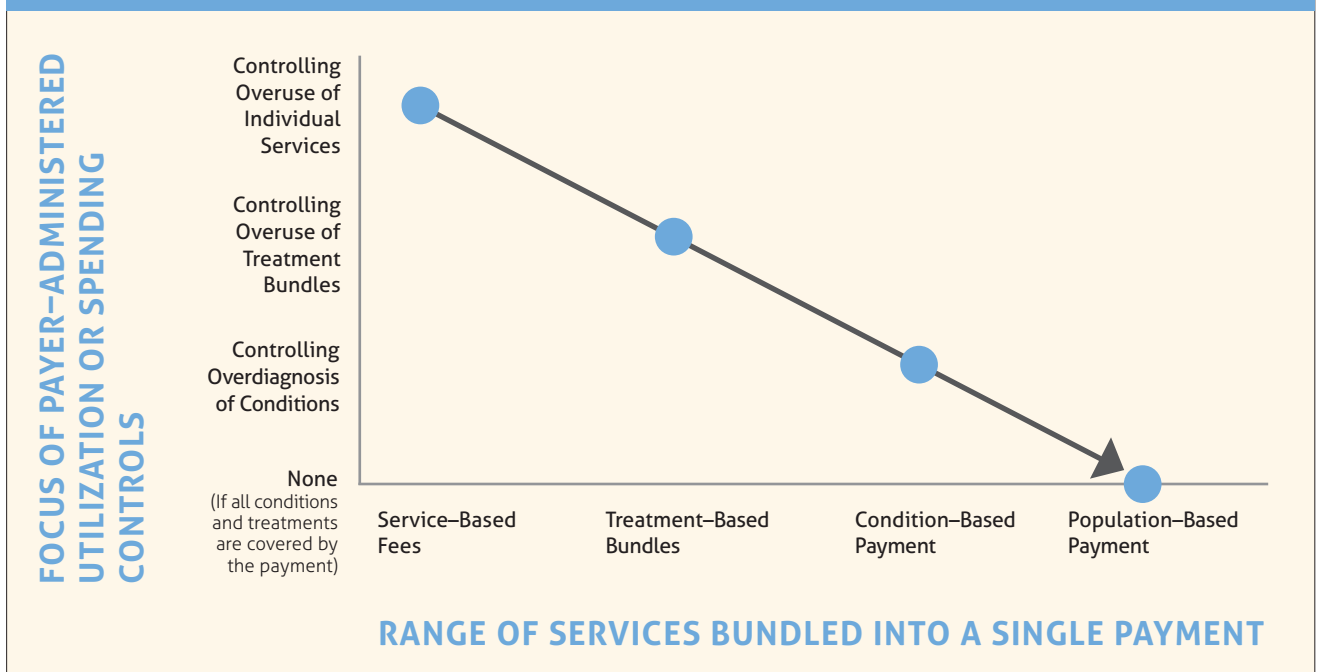
Option 2–A: Payment adjustments (pay for performance) based on utilization

Option 2–B: Payment adjustments (pay for performance) based on spending or savings

Option 2–C: Bundled payment

The specific measures of utilization or spending used in these mechanisms will depend on the decisions made about which types of services are included in a single payment in Building Block 1. As shown in Figure 3, the more bundled payment options available for Building Block 1 not only provide greater flexibility for providers to determine which services are delivered but they also require providers to control more types of utilization and spending, thereby reducing the need for payer-managed utilization/spending controls or incentives focused on individual services, treatments, or health conditions as part of Building Block 2.

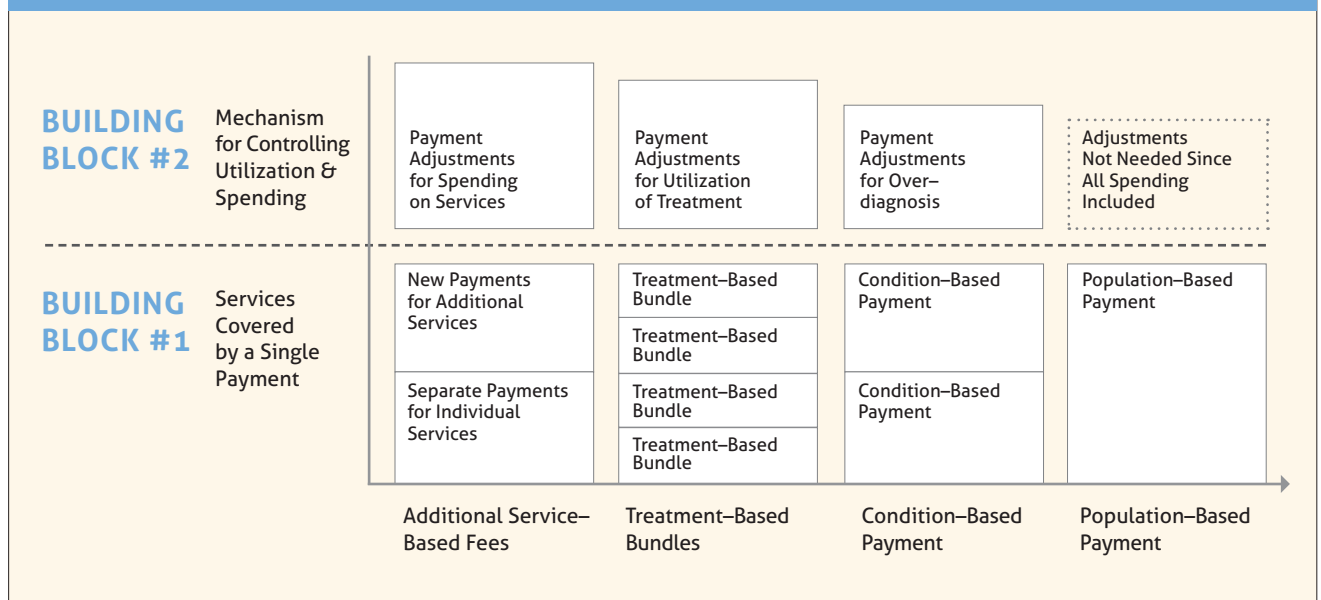
Figure 3. Relationship Between Options in Payment Building Blocks 1 and 2



**Option 2–A: Payment Adjustments (Pay for Performance)
Based on Utilization**

If delivery of a new service or a different combination of services is intended to reduce the utilization of one or more other kinds of services, then in order to encourage or ensure that such a reduction occurs, payment adjustments can be defined based on utilization of the services that are supposed to be reduced. The payer and provider would agree on which services should experience reduced utilization, the expected amount of reduction, and the amount by which payment would be adjusted based on whether that expected reduction was achieved. (This is commonly referred to as a “pay-for-performance” system.) For example, in the primary care medical home payment programs created by some commercial health plans, the payments to the primary care practice are adjusted up or down based on whether the rate at which the practice’s patients visit the hospital emergency department has decreased or increased or whether it is below or above benchmark levels.

Figure 4. Building Block 2 Addresses Utilization/Spending Not Bundled Into Payment In Building Block 1



As shown in Figure 4, the types of utilization for which adjustments are made in Building Block 2 would depend on what is bundled into a single payment under Building Block 1. There is no need to define a pay-for-performance structure to control over-utilization of services that are included in the bundle, since the provider is already accountable for controlling utilization so costs stay within the payment amount. However, if there is concern about potential overuse of a newly defined service or new bundle of services, then the pay-for-performance structure could focus on utilization of those services or bundles. If there is concern that utilization of certain services not included in the bundle might increase, then the payment adjustments could focus on that type of utilization. (Addressing concerns about *underutilization* of services within the bundled payment is addressed by Building Block 3.)

Several decisions have to be made in structuring any pay-for-performance approach of this type:¹⁴

- **Defining the specific service for which utilization is to be reduced or limited.** Although it is easier from a payer’s perspective to simply include all types of services in an accountability measure, an individual provider generally cannot control all types of services a patient receives, and so accountability mechanisms need to be focused on the specific types of services that the individual provider receiving the payment either delivers, orders, or can reasonably expect to influence. In addition to defining the service itself, it may also be necessary to define the specific *circumstances* in which the services are expected to be reduced. For example, it is reasonable to expect that a primary care practice can have an influence on whether its patients make *avoidable* emergency department (ED) visits (such as care for non-emergency minor acute problems) but not visits for serious emergencies such as auto accidents; this requires defining the types of problems or diagnoses that would cause an ED visit to be classified as “avoidable.”
- **Defining either the target amount of reduction in utilization of the service or the target level or rate of utilization of the service.** Targets are frequently defined as a reduction from a baseline simply because there is no standard for what the “right”

level of utilization is. However, this only works if one believes that there is overutilization that can be reduced. For a provider that is already managing care efficiently and effectively, the target should more appropriately be defined as *maintaining* the existing level of utilization rather than *reducing* it.

- **Defining the amount by which payment should be adjusted if the target rate or reduction is or is not achieved.** For example, one approach would be for the payer to make an additional payment to the provider if the target is met or exceeded; an alternative approach would be for the payer to reduce the provider's payment or for the provider to make a payment to the payer if the provider falls short of achieving the target.

Option 2–B: Payment Adjustments (Pay for Performance) Based on Spending or Savings

Instead of basing the payment adjustments on changes in *utilization* of a particular service or group of services (i.e., whether and how often the services are used), adjustments could be based on the amount of *spending* on that service or services or on the amount by which spending is reduced (i.e., the *savings* expected). The payer and provider would agree on the total amount of spending that should be expected or the amount by which spending is expected to be reduced, and then the same kinds of decisions described earlier would be made to define the adjustment in payment between the payer and provider based on the extent to which the spending or savings target was achieved. If the payment change is being made with an expectation that spending will *increase* in return for improvements in quality or outcomes, an agreement could be reached as to how much of an increase is appropriate, and then the pay-for-performance system could be based on ensuring spending does not increase by more than that amount.

Basing performance on *spending* instead of *utilization* means that providers must be concerned about the *prices* of services as well as whether and how frequently the services are used. Even if utilization of a service decreases, spending on that service could still increase if the services are delivered by more expensive providers or in more expensive

settings, or if the providers of the services receive higher payments than expected. Conversely, spending-based pay for performance rewards providers for arranging for patients to receive a service in a lower-priced setting or from a lower-priced provider even if utilization of the service does not decrease.

"Shared Savings" vs. Prospectively Defined Spending Targets

An important issue is whether the target for spending is defined *prospectively* or *retrospectively*. If a target is prospectively defined, then the provider can determine in advance what changes in services would likely enable it to achieve the target and make adjustments along the way if it is learned that unexpected factors are causing utilization of services or the prices of services to be higher than expected.

In contrast, in the "shared savings" model being used by Medicare and many payers, the target for spending isn't determined until *after* the spending has already occurred, rather than in advance.¹⁵ Under this approach, "true" savings are only declared to have been achieved if the spending on the patients cared for by the provider has decreased by more than spending has decreased on the patients of other providers (or if spending has increased more slowly than it has increased for other providers' patients). However, the spending levels for the patients of other providers is only known after they have occurred. Although this is intended to avoid setting a spending target prospectively that turns out to be higher than what other providers achieve without the shared savings program, this approach creates significant problems for providers trying to deliver higher-value care:

- The provider cannot determine in advance what level of utilization or spending will be considered satisfactory. Even if the provider reduces

"Shared savings" programs create significant problems for providers trying to deliver higher-value care because the provider cannot determine in advance what level of utilization or spending will be satisfactory, and the comparison group of patients used to determine whether savings have been achieved may not be truly comparable to the patients of the provider hoping to receive the shared savings payment.

spending significantly compared to previous levels, the provider may still be penalized if other providers are determined to have achieved similar reductions without the benefit of the payment change.

- The patients of the comparison group of providers that is used to determine what spending would have been in the absence of the payment change may not be truly comparable to the patients of the provider seeking to receive the shared savings payment. Other providers may have different types of patients or experience changes in patient characteristics or changes in other factors in their markets that reduce spending more than what is possible for the provider being evaluated. The more providers that are participating in the shared savings payment program, the more difficult it will be to find a valid comparison group of providers that are not participating in the program.

Option 2–C: Bundled Payment

Instead of measuring specific categories of utilization or spending and making separate payments or payment adjustments based on how utilization or spending in those categories compares to a target, the services for which utilization or spending is to be *reduced or controlled* could be *bundled* into the same payment as the services that are to be *delivered*, and the price of the bundle would be defined based on the expected level of spending on both sets of services. The provider would then be responsible for covering the higher costs if savings are not achieved as expected on the services that are to be reduced or controlled, but the provider would also benefit financially if greater than expected savings are achieved.

Bundling for Accountability vs. Bundling for Flexibility

Bundling for accountability can be defined around specific treatments or specific patient conditions, the same as the bundling options discussed as part of Building Block 1, but bundling for accountability has a different purpose than the bundled payment options discussed earlier. In Building Block 1, a service is included in the bundle in order to give the physician,

hospital, or other health care provider the *flexibility* to use or not use that service in delivering a particular treatment or in addressing one or more of a patient's health conditions. When bundling is used as a mechanism of accountability in Building Block 2, a service is included in the bundle in order to ensure the provider *controls* utilization and spending on that service, even if the service is delivered by a different provider.¹⁶

Global Payments vs. Global Budgets vs. Shared Savings

If the provider is being held accountable for the total spending on all services for the patient, then this bundle is typically referred to as a "global" payment or budget:

- If the accountable provider has the capability of paying claims from other providers for services they deliver to the patient, then the accountable provider can receive a *global payment* from the payer and the payer can delegate to the accountable provider the responsibility for making the payments to other providers.
- If the accountable provider is unable or unwilling to pay claims to other providers or if the payer is unwilling to delegate claims payment responsibility to the provider, then the payer and accountable provider would define a *global budget* instead. In a global budget arrangement, the payer would continue to pay claims from other providers, deduct them from the budget, and pay the balance remaining in the budget to the accountable provider.

A global budget is different from and preferable to the shared savings concept described earlier. The global budget is set *prospectively*, so the provider(s) operating

A global budget is preferable to "shared savings" because the provider(s) operating under the global budget know the level of spending they must achieve and can develop a detailed business plan for how to do so, and they can plan for how to distribute surpluses or allocate overages based on the extent to which individual providers achieved their individual responsibilities under the business plan.

under the global budget can develop a detailed business plan for how to keep spending within the budget and how to distribute surpluses or allocate overages based on the extent to which individual providers achieved their individual responsibilities under the business plan. In contrast, under a shared savings model, it is impossible to define a clear business plan because the target spending level is not known until after the fact. For example, the Alternative Quality Contract developed by Massachusetts Blue Cross Blue Shield defines a global budget for all of the care that a group of patients need, with annual spending levels over a five-year period defined in advance. If the provider group responsible for those patients keeps total fee-for-service spending below the budget, it receives a supplemental payment based on the difference between spending and the payment.¹⁷

Exclusions and Adjustments for Specific Types of Utilization or Price

A provider may be able to accept accountability for most but not all types of services or spending, in which case certain exclusions may be defined from a global payment or budget. In some cases, the exclusion may relate to price, but not utilization, mirroring the distinction in options 2-A and 2-B. For example, a provider may be willing to take accountability for all types of utilization and spending other than the prices of drugs that are sold only by one manufacturer. To address this, the global payment or budget could be adjusted based on any changes in the prices of those products or services.

Strengths and Limitations of the Different Options

As with the different options for bundling payments, each of the different options for spending accountability has different strengths and limitations, as described in Table 2. No one option will be best for all providers, payers, or patients.

Table 2. Strengths and Limitations of Different Mechanisms For Controlling Utilization And Spending

Options For Payment Controlling Utilization/Spending	Strengths	Limitations
2-A: Payment Adjustments (Pay for Performance) Based on Service Utilization	<ul style="list-style-type: none"> • Allows rewards or penalties to be targeted to specific kinds of utilization • Allows the size of rewards or penalties to be set based on the impacts of utilization other than just spending • Allows providers to be held accountable for ordering services from other providers but not for the prices they charge 	<ul style="list-style-type: none"> • Requires specific rewards or penalties to be assigned to individual kinds of utilization • Rewards providers for reducing utilization even if services are shifted to higher-cost providers or locations • Rewards may not be adequate to control utilization, and penalties may not offset the costs of higher utilization
2-B: Payment Adjustments (Pay for Performance) Based on Spending	<ul style="list-style-type: none"> • Holds providers accountable for using lower-cost services and providers, not just lower utilization • Allows the size of rewards or penalties to be balanced so they are more manageable for smaller providers 	<ul style="list-style-type: none"> • Requires specific rewards or penalties to be defined that may or may not be adequate to encourage spending control or to offset higher spending for payers • May encourage providers to avoid using higher-quality services from higher-priced providers
2-C: Bundled Payment	<ul style="list-style-type: none"> • Gives providers the flexibility to increase spending on one service if it will result in a more than equal reduction in spending on other services • Avoids the need to establish specific rewards or penalties for individual types of utilization or spending 	<ul style="list-style-type: none"> • May encourage providers to avoid using higher-quality services from higher-priced providers • Changes in spending for external services may not leave sufficient revenues to cover the costs of the provider's own services • Bundling is only feasible where the provider can control the services included in the bundle

Building Block 3: Mechanism for Assuring Good Quality and Outcomes

If one of the goals of providing more payment or greater flexibility in payment to a provider is to improve quality, the purchaser or payer will want accountability from the provider that quality will, in fact, be improved. If the primary goal of the change in care delivery is to reduce spending, the purchaser or payer will likely want accountability by the provider to ensure that quality of care will not also be decreased.

In general, as illustrated in Figure 5, the more flexibility that a payment system gives a provider to choose which services a patient receives within a fixed amount of payment, the greater the risk that some providers may deliver fewer services to patients than they need. This is because if fewer services are provided within a broader bundle of services, the provider's costs will decrease but its revenues will not, thereby improving its operating margin.

Consequently, if the more-bundled options are chosen for Building Block 1, there will be a greater need for strong mechanisms in Building Block 3 to protect against underuse of services within the bundles. In a population-based payment, the risk is not just that high-cost services will not be delivered when needed to treat a health problem. There are also risks of underinvestment in preventive services and of failing to address conditions that are expensive to treat in the short run but where earlier treatment can avoid more expensive treatments beyond the period of time covered by the population-based payment.

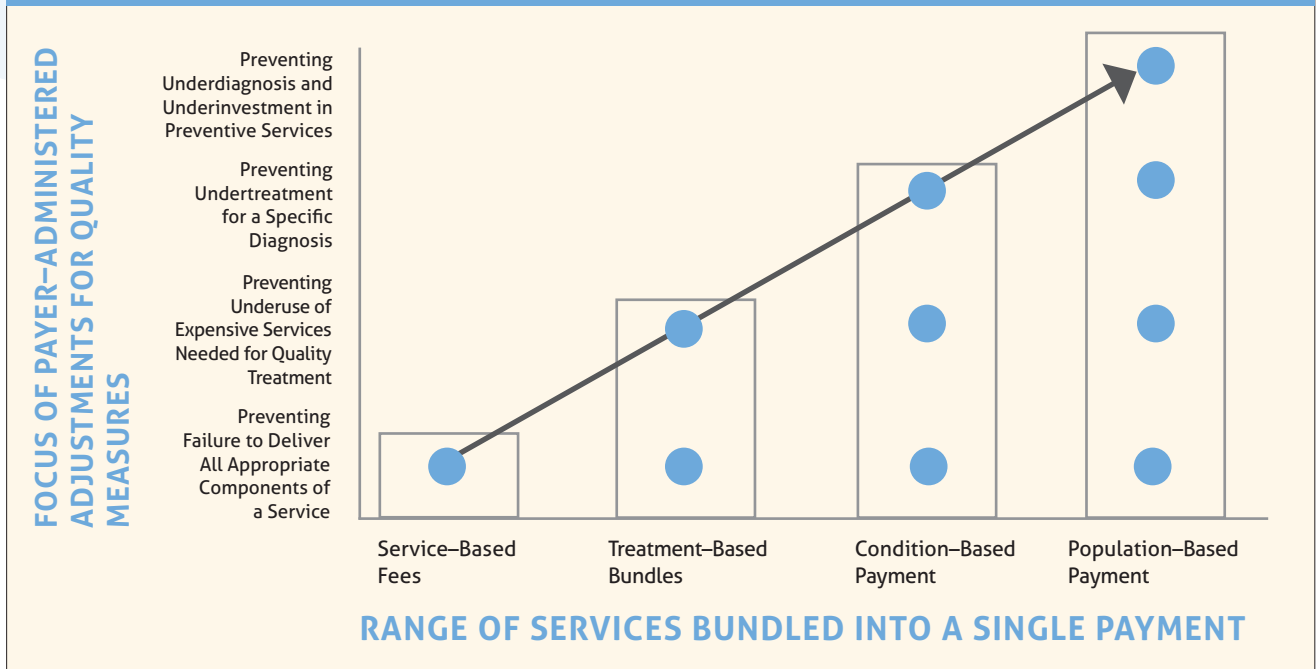
There are three basic approaches for how accountability for quality and outcomes can be incorporated into a payment system:

Option 3–A: Establishing minimum performance standards

**Option 3–B: Payment adjustments (pay for performance)
based on quality/outcomes**

Option 3–C: Warrantied payment

Figure 5. Relationship Between Options in Payment Building Blocks 1 and 3



Option 3–A: Minimum Performance Standards

One approach to assuring quality is to define a minimum set of performance standards that the provider must achieve in order to be eligible for payment. If the standards are not met, then no payment would be made, even if the provider delivered services to the patient and incurred costs to do so.

Four types of performance standards can be used to promote quality:

- i. Structural standards**, i.e., specifying the types of facilities, equipment, staffing, training or other capabilities that a provider is expected to have. For example, a primary care practice might be required to have a diabetes educator available to assist patients with diabetes.
- ii. Process standards**, i.e., specifying the steps to be taken during care delivery. For example, a primary care practice might be required to regularly order or perform a blood test on its diabetic patients.

iii. Intermediate outcome standards, i.e., specifying the results that are to be achieved during the process of care. For example, a primary care practice might be evaluated based on whether its patients achieve desired levels of blood sugar, cholesterol, and blood pressure.

iv. (Final) Outcome standards, i.e., specifying the outcomes that are to be achieved after care is completed (or, for chronic conditions, after care has been given for a specific period of time). For example, a primary care practice might be evaluated based on the rate at which its diabetic patients experience foot ulcers, amputations, blindness, kidney failure, heart attacks, etc.

Patients and payers would generally prefer to define standards in terms of outcomes, and a variety of efforts are underway to define outcomes for various conditions and collect the data needed to measure them. However, to date, performance standards have typically been based on either structural or process measures since these are generally the easiest to measure objectively and are more likely to be under the direct control of the provider being measured.

Unless there is clear evidence that meeting a structural or process standard is necessary to achieve good outcomes, requiring the use of structural or process measures can reduce flexibility and increase costs, making it more difficult to achieve Goals 1 and 2 and counteracting the effectiveness of the mechanisms for flexibility and accountability defined in Building Blocks 1 and 2. Moreover, since there is generally a cost to achieving higher performance, the amount of payment for the service or bundle of services will need to be adequate to cover that cost (which can be addressed through the mechanisms in Building Block 4).

Option 3–B: Payment Adjustments (Pay for Performance) Based on Quality/Outcomes

Requiring a minimum performance standard ensures that the *minimum* is achieved in return for a payment, but it does nothing to encourage or reward performance that is *better* than the minimum. To address this, the provider's payment can be adjusted in some way based on the level of performance on one or more measures of quality. These payment

The Building Blocks of Successful Payment Reform: Designing Payment Systems that Support Higher-Value Health Care

adjustments—what is typically referred to as “pay for performance”—can be used in *addition* to a minimum performance standard or it can be used *instead* of a minimum, particularly if it is not clear whether or how to establish a minimum standard. As with minimum standards, quality-based pay for performance can be based on measures of structure, process, intermediate outcomes, or final outcomes. Outcome-based measures are generally preferable from the perspective of purchasers and patients if they are available, but it may be difficult to use them for accountability unless the provider who is being held accountable has control over all of the factors that can affect outcomes. The mechanisms in Building Block 4, such as risk adjustment/stratification, can be used to ensure that accountability for outcomes does not penalize or reward providers based on the effects of factors outside of their control.

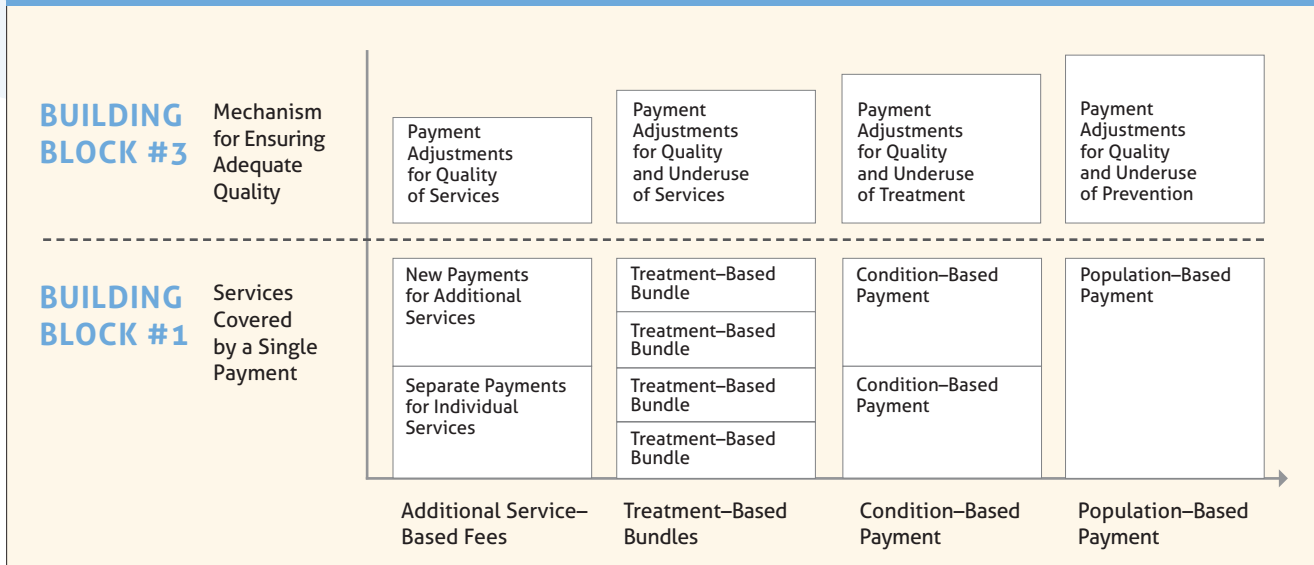
In order for a quality-based pay-for-performance (P4P) system to be an effective part of a payment reform designed to support a change in care delivery, the quality measures chosen need to correspond with the specific areas where quality is expected to improve and/or with any areas where there is a risk of under-treatment associated with the change in payment. As shown in Figure 6, the specific areas of focus for quality measures will depend on what services have been bundled into a single payment in Building Block 1.

In many cases, however, measures have not been developed to control for underuse in the specific areas needed as part of a payment system. In the absence of the “right” measures, there has been a tendency for payers to use whatever measures happen to be available. However, it may well be better to use no measure at all than a measure that has little or no relationship to the care that is being delivered or the outcomes being sought. Using an irrelevant quality

It may be better to use no quality measure at all than a measure that has little or no relationship to the care that is being delivered or the outcomes being sought, since using an irrelevant quality measure forces the provider to divert time and energy away from successfully implementing the care change and it may increase costs and impede the ability to achieve the improvements that were the real goal of the care delivery change. Moreover, an irrelevant quality measure could lead a patient to either inappropriately choose a poor quality provider or avoid a provider who does perform well on what really matters.

The Building Blocks of Successful Payment Reform: Designing Payment Systems that Support Higher-Value Health Care

Figure 6. Building Block 3 Protects Against Underuse Of Services Bundled Into Payment In Building Block 1



measure forces the provider to divert time and energy away from successfully implementing the care change, and if a quality measure conflicts with the goal of the care change, it can increase costs and impede the ability to achieve the improvements that were the real goal of the care delivery change. Moreover, an irrelevant quality measure could lead a patient to either inappropriately choose a poor-quality provider or avoid a provider who does perform well on what really matters.

For whatever quality measures are used, a series of decisions must be made in order to use them as part of the payment system, including:

- What level(s) of performance on the selected quality measures will trigger adjustments in payment?** In some cases, performance levels can be defined based on absolute standards (i.e., what evidence shows is achievable) but in many cases, performance levels can only be defined in terms of what other providers have been able to achieve. It is important that these performance level standards be established *prior* to the beginning of the period in which the provider will be held accountable for achieving the standard, so that the provider can design and implement a strategy for achieving that performance level.¹⁸

- **How large will the adjustments in payment be?** Since there is generally a cost to achieving higher performance, if the change in payment is less than the cost of achieving the performance level, improving performance may cause financial problems for the provider. There may also be differences in the costs of achieving performance for different providers, and so the thresholds and sizes of quality-based rewards or penalties may need to be adjusted for different providers using the mechanisms in Building Block 4.
- **Will improvements in performance be rewarded as well as performance relative to fixed standards or relative to the performance of other providers?** Even if the quality of care that a provider delivers is below desired levels or below the level delivered by other providers, if the provider's quality is higher than in the past, patients are better off and so it may be appropriate to reward the provider (or not penalize her) if improvement has occurred, particularly if her patients would have difficulty finding any providers who have better performance.

Option 3–C: Warrantied Payment

A third approach is to incorporate a “warranty” into the payment for specific aspects of quality. Under a warrantied payment, the provider would be responsible for treating preventable complications or correcting other quality problems that occur, but the provider would receive no additional payment from the payer for the additional services delivered for that purpose. For example, a warranty for surgical site infections would mean that if a surgical site infection occurred, the physician and hospital that performed the surgery would be responsible for the cost of treating the infection with no additional payment. A warranty for diabetic care could state that if specific services are not delivered to a diabetic patient during an office visit (e.g., examination of the patient's feet and administration of appropriate blood tests), the provider would schedule an additional office visit or a home visit in order to perform the missing services at no additional cost to the patient or the payer.¹⁹

A warranty is different than a minimum performance standard, since the provider is committing to *address* the quality problem rather than simply relinquishing payment for the services that were delivered if quality

does not meet the standard. Including a warranty as part of a payment is also different than saying that there is no payment at all for correcting the quality problems, since the costs associated with preventing quality problems and for correcting the problems that do occur would need to be incorporated into the amount paid for the treatment itself, i.e., those costs would be bundled into the treatment-based bundle or the condition-based payment. It is important to recognize that a warranty is not a *guarantee* that complications or quality problems will not occur; it is simply a commitment to treat the complications or quality problems that do occur at no extra charge.

Implementing a warranted payment requires defining the types of complications or quality problems that are covered by the warranty. This is similar to defining a quality measure for a pay-for-performance system and a minimum performance standard as described in the previous options. In addition, however, implementing the warranty requires:

A warranty is not a guarantee that complications or quality problems will not occur; it is simply a commitment to treat the complications or quality problems that do occur at no extra charge.

- **defining which providers' services are covered by the warranty.** If a complication or quality problem arises, a patient may *need* to receive treatment from a *different* provider (e.g., if the patient cannot access the provider who originally delivered the treatment when a serious complication occurs) or the patient may *want* to receive treatment from a different provider (rather than return to a provider who delivered poor-quality care). Depending on the nature of the quality problem, the warranty may be of limited value if it only covers services delivered by the provider of the original service, so the warranty will need to define when and how other providers will be paid for addressing all or part of the complication or quality problem covered by the warranty.
- **defining any limits on the types or costs of treatment that would be provided.** Similar to the limits on warranties for products and services in other industries, a health care provider may need to define limits on how much will be done or how much will be spent to correct a quality problem before additional payment is needed.

- **defining what would be done if a particular quality problem could not be corrected (or could not be corrected within the limits on treatment costs defined in the warranty).** For example, compensation might be paid to the patient, or the payment to the provider might be reduced or eliminated (a form of “money back guarantee”).

Strengths and Limitations of the Different Options

As with the different options for accountability for spending, each of the different options for accountability regarding quality has different strengths and limitations, as described in Table 3. No one option will be best for all providers, payers, or patients.

Table 3. Strengths and Limitations of Different Mechanisms For Assuring Adequate Quality and Outcomes

Options For Assuring Adequate Quality/Outcomes	Strengths	Limitations
3-A: Minimum Performance Standards	<ul style="list-style-type: none"> • Avoids paying for services below a minimum level of quality 	<ul style="list-style-type: none"> • Requires defining a threshold below which no payment will be made even if services have been delivered • Does not encourage delivery of higher-quality care than the minimum
3-B: Payment Adjustments (Pay for Performance) Based on Quality	<ul style="list-style-type: none"> • Encourages higher-than-minimum quality levels 	<ul style="list-style-type: none"> • Requires bonuses or penalties to be set for different levels of quality • Bonuses and penalties may not be sufficient to offset higher costs needed to achieve higher quality
3-C: Warrantied Payment	<ul style="list-style-type: none"> • Gives the provider the flexibility to change the types of services used in order to improve quality and outcomes • Allows the patient and payer to more easily compare the cost and quality of different providers using a single metric 	<ul style="list-style-type: none"> • Requires determining the cost of avoiding quality problems, the expected rate of quality problems, and the cost of correcting problems in order to properly price the warranty • It is difficult to anticipate all circumstances in which quality problems will arise and the potential costs of addressing them

Building Block 4: Mechanism for Assuring Adequacy of Payment

Although greater *flexibility* in payment may make it *easier* to deliver a lower-cost mix of services that achieves better outcomes for patients than is possible under the current payment system, delivering those services or achieving those outcomes is only *feasible* if the *amount* of the payment is *adequate* to cover the cost of the new mix of services. Each of the other three Building Blocks of the payment model—the bundle of services covered by the payment, the mechanism for accountability on spending, and the mechanism for accountability on quality—need to be designed based on realistically achievable costs of services:

- A payer will want to know if the amount of payment for the bundle is less than the sum of its current payments for the services in the bundle, while the provider will want to know if the amount of the bundled payment will be more than its average costs of delivering the services patients need as part of the bundle. If current payments for services are lower than what it costs a provider to deliver those services, creating a bundled payment whose amount is less than or equal to the sum of the current payments may still not be adequate to cover the costs of care.
- If the size of the payment adjustments based on utilization or spending are less than the differences in what it costs a provider to achieve the corresponding levels of utilization or spending, the provider may not be able to afford to achieve the desired levels of utilization or spending.
- If the size of the payment adjustments based on quality are less than the differences in what it costs a provider to achieve the corresponding levels of quality, the provider may not be able to successfully achieve the desired levels of quality.

Bundled and global payment systems are often criticized for creating incentives to eliminate necessary care as well as unnecessary care, but there is widespread evidence that patients are also not receiving the care they need under fee-for-service payment systems. In both cases, this can be caused if the payments for the services or bundles are lower than the cost of delivering those services or bundles in a high-quality way. Under any payment system, it is important to ensure that payment amounts are adequate.

Moreover, the pressure on a provider to deliver services in ways that may have a negative impact on quality is greater if the amount of payment is insufficient to cover the costs of needed services. Bundled and global payment systems are often criticized for creating incentives to eliminate necessary care as well as unnecessary care, but there is widespread evidence that patients are also not receiving the care they need under fee-for-service payment systems. In both cases, this can be caused if the payments for the services or bundles are lower than the cost of delivering those services or bundles in a high-quality way. Moreover, ensuring that the amounts of payment are adequate to deliver good quality care allows higher minimum standards of quality to be established and reduces the need to have complex systems for measuring and adjusting payments based on quality or to have many limitations on what situations are covered by warranties.

Determining the Minimum Achievable Costs of Care

Consequently, no matter what payment structure is used to support a new approach to high-quality care delivery, it is essential to determine what the minimum achievable costs are for providers to deliver that care. As noted in Section I, before attempting to design a change in the payment system, a business case analysis should first be conducted, and a key part of this analysis is to determine what costs will be under the new approach to care delivery. This analysis can then be used to determine the appropriate amount of payment needed to support the planned changes in care.

A common method used to estimate a provider's cost of delivering a specific service is to apply an overall "cost-to-charge" ratio to the charge (i.e., price) that the provider has established for that individual service.²⁰ However, this is rarely an accurate estimate of costs, for three reasons:

- The charges themselves typically are not based on the underlying costs of services, and the charges for different services may differ for many reasons other than the differences in costs between the services;
- Many of the costs that a provider incurs to deliver a service are fixed and will not be proportional to the volume of services delivered, so

the difference between the cost and the charge will vary depending on the volume of services delivered; and

- A new approach to care may involve new types of services or new ways of delivering existing services to which current charges or cost estimates do not apply.

It is also not sufficient to simply determine a provider's *current* costs of delivering the services in question. An analysis should be done to determine what additional efficiencies could be achieved in service delivery using techniques such as Lean design. However, it will be important to recognize that some of the savings from improved efficiency will take time to achieve; for example, if a provider has made investments in facilities, equipment, personnel, or supplies that are now viewed as unnecessary or that could be replaced by lower-cost alternatives, it will take time to pay off stranded fixed costs and to make the replacements.

Factors Affecting Costs That Are Beyond Providers' Control

Although estimates of the actual costs of delivering services efficiently will help in setting appropriate payment amounts, those costs will be different for different providers, and they will change over time for several reasons that are beyond the provider's control:

- **Differences or changes in patient needs.** If a physician or hospital has patients with more health problems or more serious health problems, then the patients will likely need more services and the provider's costs will be higher. A payment amount that is assigned to a service or bundle of services may cover the *current* average cost of delivering the service or bundle of services across a group of patients, but if the characteristics of the patients *change* in ways that increase the time or materials associated with a particular service or the mix of services required, the average cost of the service or bundle will change and the payment amount likely will also need to change.
- **Differences or changes in patient volume.** Although the current fee-for-service payment system *pays* a provider the same amount for each service no matter how often the provider delivers the service,

that does not mean the *cost* of the service is the same no matter how often it is delivered. For most services, a health care provider incurs significant fixed costs—in facilities, equipment, and personnel—to be able to deliver that service. Those *fixed* costs do not change, particularly in the short run, if the service is provided more or less frequently, and so the *average* cost of delivering the service will decrease if it is delivered more often and the average cost will increase if it is delivered less frequently. When a purchaser asks for a discount in price for sending more patients to a provider for a service, the purchaser is implicitly acknowledging that the provider's average cost of services should decrease with greater volume. The converse, though, is that if improvements in care enable patients to stay healthier and thereby need fewer services, purchasers may need to pay *more* for each service because the average cost per service will increase for the smaller number of services that continue to be provided.²¹

- **Changes in prices of medical technology.** A significant portion of health care spending is used to purchase drugs or medical devices, and if a drug or device is manufactured by a single company, a physician or hospital may have little or no choice but to pay more if the manufacturer raises the price.
- **Changes in evidence about appropriate care delivery.** Both medical technology and evidence about the effectiveness of services changes over time, and this can mean that the cost of delivering the most appropriate services can change.

Structuring Financial Risk Appropriately

Concerns that are raised about the financial “risk” of a payment system for providers are generally based on inadequacies in the way the payment system adjusts for the differences described above. It is important to recognize that there is some degree of financial risk involved in *any* payment system, including the fee-for-service system. For example, when physician practices are paid for office visits, the practice incurs the risk that it will not have enough patients or office visits to generate sufficient revenues to cover its costs. The risks are *different* under different payment

The Building Blocks of Successful Payment Reform: Designing Payment Systems that Support Higher-Value Health Care

systems—for example, in a capitation payment system, the physician practice's finances would be at risk if too many patients schedule office visits rather than too few—but it is not the case that physicians and other providers have no financial risk under the current payment system and that they would be accepting financial risk for the first time under bundled or other payment systems.

What is important in designing a successful payment system is not just the *amount* of risk that is given to providers but whether the *type* of risk they are given is something they can successfully manage. There are two key types of risks in health care payment and delivery: *insurance risk* and *performance risk*.²²

- **Insurance Risk.** If a patient has a serious or major health condition such as cancer, head trauma, pregnancy, etc., the patient will need extensive and expensive services to treat that condition. Moreover, the cost of treating a health problem can increase significantly based on whether a patient has other health problems such as diabetes, heart disease, etc., and based on other characteristics of the patient, such as functional limitations, language barriers, etc. Health care providers generally have little or no control over whether a patient has these kinds of health problems and other characteristics, so it is inappropriate for providers to be paid the same amount to care for patients regardless of the types of patients they see. One of the fundamental purposes of having health insurance is to pay for the additional costs of health care services due to unpredictable and unavoidable health problems and other factors, so the risk of higher costs because a patient has health problems or characteristics that require more services is part of what is considered “insurance risk.”
- **Performance Risk.** Conversely, a physician or hospital usually has multiple options available for treating a patient's health care

There is financial risk involved in any payment system, including the fee-for-service system. The risks are different under different payment systems, but it is not the case that physicians and other providers have no financial risk under the current payment system and that they would be accepting financial risk for the first time under bundled or other payment systems. What is important in designing a successful payment system is not just the amount of risk that is given to providers but whether the type of risk they are given is something they can successfully manage.

problem and the provider has considerable control over the cost and efficiency with which treatment is delivered. Payers generally do not determine treatment choices and cannot directly influence the efficiency of service delivery, so the risk of higher costs due to inefficient or incorrectly delivered treatment for a patient with a particular condition is referred to as “performance risk.”

A key problem with the current fee-for-service system is that it forces *payers* to accept *performance risk*, when it is providers, not payers, who control what services are delivered and how effective they are. Conversely, the problem with some payment reforms, such as traditional capitation, is that they transfer *insurance risk* to *providers*, even though health insurance plans, not providers, have the capabilities needed to manage insurance risk. Consequently, an effective payment system should ensure that *payers retain insurance risk* and that *providers accept performance risk*.

Options for Ensuring Adequacy of Payment and Separating Insurance and Performance Risk

There are several options for adjusting payments to ensure they are adequate to enable providers to deliver high-quality care and to ensure that providers only take on performance risk and not insurance risk:

Option 4–A: Risk adjustment

Option 4–B: Outlier payments

Option 4–C: Risk corridors

Option 4–D: Volume adjustments to payment

Option 4–E: Setting and periodically updating payment amounts to match costs

Option 4–A: Risk Adjustment and Stratification

Risk adjustment is a principal mechanism for ensuring that payers retain insurance risk and providers take on performance risk. If one patient has more health conditions or more severe conditions than another patient, then the payment to the provider should be adjusted so that more money is provided for care of the first patient than the second.

The most common approach to risk adjustment is to calculate a “risk score” for a patient based on the number and types of health problems they have and then adjust the payment up or down proportional to that score. There are a number of different systems for creating such risk scores. For example, the Hierarchical Condition Category (HCC) system is used in the Medicare program to adjust payments to Medicare Advantage plans and to adjust shared savings payments to Accountable Care Organizations based on the relative risk and acuity of the patients they care for.²³

However, in general, differences in easily measurable patient characteristics do not have simple linear relationships to the type and amount of care they need, so the amount of payment needed may not be directly proportional to a risk score. In addition, the same patient characteristics have different effects on the treatment costs for different conditions, so no one risk scoring system will be ideal for every treatment-based bundle or every condition-based payment. Also, most claims-payment systems are not designed to adjust the amount of payment for an individual claim based on a patient risk score, so there are practical challenges for payers to implement this approach.²⁴

An alternative approach is to *stratify* payment for treatment-based bundles, condition-based payments, or population-based payments into several discrete levels, each of which would be associated with particular ranges and combinations of characteristics of patients. Lower payment amounts for a bundle could be provided for groups of patients with characteristics likely to require fewer services, and higher payment amounts could be provided for groups of patients with characteristics likely to require more services. This is the approach used in the system of Diagnosis Related Groups (DRG) that Medicare uses to pay large hospitals; in addition to defining many DRGs based on the patient’s primary diagnosis, there are typically three levels of the DRG based on the number and severity of the patient’s comorbidities. An advantage of this approach is that it does not require that there be any particular mathematical relationship between different patient characteristics and the payment level; the payment level for each risk category can be independently set

based on the expected spending on services for patients in that category. This approach can be implemented within existing claims payment systems by defining a separate billing code for each of the different levels of services for patients. The provider would determine which level is appropriate based on a patient's characteristics, and then it would use the corresponding billing code to request the appropriate amount of payment for delivering the relevant bundle of services to the patient.

Risk adjustment or stratification is also an important complement to the accountability mechanisms in Building Blocks 2 and 3 of a payment system. In addition to the services delivered by the provider, utilization and spending on other services for the patient and the quality/outcomes performance associated with the provider's care will typically depend on the characteristics of the patient, so the performance measures used in the accountability components of a payment system should also be appropriately risk-adjusted or risk-stratified.

Option 4–B: Outlier Payments

Risk adjustment systems can help to separate insurance risk and performance risk by measuring the extent to which a provider's patients have characteristics that typically require more health care services or more expensive services. However, no risk adjustment or stratification system can adequately address rare patient characteristics or unique combinations of characteristics that lead to an individual patient needing an unusually large number of services or unusually expensive services. A single patient can have health care problems that require services costing millions of dollars, and if those costs had to be covered through a fixed amount of payment under a treatment bundle, condition-based payment, or population-based payment, it could bankrupt a small provider and cause serious financial problems even for a large provider.

These situations can be addressed by including a provision for "outlier payments" or "stop loss" in a payment system. A typical approach is to make an outlier payment if the total number of services delivered to a patient or the total spending on services for a patient exceeds some threshold or some multiple of the payment level. For example, although the default payment from Medicare to a hospital participating in the

Inpatient Prospective Payment System is a fixed, pre-defined payment (the DRG amount) based on the patient's diagnoses and the primary procedure performed, if a patient needs an unusually large number of services or unusually expensive services, the hospital will receive an additional outlier payment from Medicare for that patient.

Option 4-C: Risk Corridors

An outlier payment can prevent a provider from being bankrupted by an *individual* patient who requires unusually expensive care, but a provider could also face financial problems if an unusually large *number* of patients need care that is more expensive than the average amounts used to set the price of a treatment bundle, condition-based payment, or population-based payment. This could be due simply to random variation in patient characteristics that are not captured effectively by the risk adjustment system, particularly for providers with relatively small numbers of patients, or it could be due to non-random but unexpected factors, such as a significant increase in the price of an essential drug or medical device.

This type of risk can be addressed through what is commonly referred to as a "risk corridor."²⁵ For example, the provider and payer might agree that if the total cost of services for all of the patients being cared for under a particular treatment bundle, condition-based payment, or population-based payment exceeds 110 percent of the total payments that are made for all of those patients, the payer will make an additional payment to the provider to cover all or part of the costs above the 110 percent threshold. The payer and provider could also agree that if the total cost turns out to be significantly lower than the total payments that are made, the provider will return to the payer all or part of the payments that are made beyond a certain percentage above the costs incurred.²⁶

Since smaller providers will be more likely to experience random variation in patient characteristics and will be less likely to have the ability to cover significant gaps between payment and costs or to manage significant variations in cash flow, it would be appropriate to use narrower risk corridors for smaller providers than for larger providers, even if all other aspects of the payment system are the same.

Option 4–D: Volume–Based Adjustments of Payments

Because a provider will incur both fixed and variable costs²⁷ for most of the services and treatments they deliver, a provider that delivers a higher volume of services will have lower average costs than a provider that delivers a lower volume of services. For example, all else being equal, it will cost more per visit to operate a hospital emergency department in a small community than in a larger community simply because both emergency departments will need similar types of equipment and staff, but there will be fewer patients using the emergency department in the smaller community.

This can be addressed by adjusting payment amounts to reflect the different rates of utilization that are likely to occur in a particular community. For example, the Medicare program makes adjustments in payments to certain hospitals that have low volumes of patients or are located in rural areas.

However, even if payment amounts are set differently for different providers based on the expected utilization of services in a particular community, the payment system can still create undesirable financial rewards and penalties when the volume of services changes. Because a portion of the provider's costs are fixed, a payment option under Building Block 1 that is tied to individual services or treatments will improve the provider's operating margins if the number of services or treatments is increased and cause potential losses if the number of services or treatments decreases.²⁸ Conversely, the population–based payment option has exactly the opposite effects.

The accountability mechanisms in Building Block 2 can address this if the changes in payments made for changes in utilization match or exceed the changes in average costs that occur at different levels of utilization. For example, if a bonus payment is paid to a health system for reductions in avoidable emergency department visits, the amount of that bonus payment could be set at a level designed to cover the fixed costs the hospital will continue to incur even with fewer visits.

An alternative approach would be to use a combination of the population–based payment and treatment–based bundles in Building Block 1 so that the payment structure the payer is using will better match the cost

structure the provider faces. For services that have a relatively high proportion of fixed costs, the payment could be primarily a population-based payment, and for services that have relatively high variable costs, the bulk of the payment could be in the form of treatment bundles. For example, most of the costs in a primary care practice are fixed costs—the office rent, equipment leases, physician and office staff salaries, etc. are all the same each month regardless of how many patients are seen. Consequently, a primarily population-based payment better matches the practice's cost structure. Similarly, a hospital emergency department is expected to be fully staffed on a 24/7 basis whether it has emergencies or not, so it makes more sense to pay for emergency care based on the size of the population in the community, not based on how many patients are actually seen. In contrast, for services with a high proportion of variable costs, such as elective outpatient procedures using expensive devices or drugs, payments could be made primarily through treatment-based bundles, since the provider will not incur the costs of the devices or drugs if the treatments are not performed.

Option 4–E: Setting and Periodically Updating Payment Amounts to Match Costs

A final option is to set and periodically update payments to ensure they match the costs of delivering high quality care.

One approach is to conduct analyses of the actual costs individual providers incur and then use this information to set appropriate payment rates. For example, the Centers for Medicare and Medicaid Services (CMS) attempts to do this for Medicare payment rates, focusing particularly on those services that have been identified as “misvalued.” In order to ensure that payments closely match costs, cost information would need to be obtained from a representative sample of providers of different types in order to determine the costs that efficient providers could expect to incur. It is easier to do accurate analyses of costs if the other options for adjusting payments, such as risk adjustment, are also being used, since it is important to distinguish if providers have lower costs because they are more efficient in delivering care or because they have a different mix of patients.

An alternative approach is to look to market forces to determine the most appropriate payment rates, (i.e., identifying the prices that health care providers accept when they are competing to attract patients). This can only be done for a subset of health care services (those where the patient can make a choice as to whether to use the service or not), in a subset of communities (those where the patient has a choice of providers and where accurate information is available about price and quality), and for a subset of patients (those whose insurance benefit design makes them sensitive to the differences in prices between different providers). This approach will also be more reliable if the other options are being used (e.g., risk-adjusting payments to determine whether providers offering lower prices are caring for healthier patients) and also if payments are made using larger bundles of services with warranties, since it will be easier for patients to make apples-to-apples comparisons and ensure that the lower prices are not due to lower quality care. National payers, as well as payers and providers in non-competitive markets, could look to the payment amounts in competitive markets to help them determine appropriate payment levels, although adjustments would still need to be made for any significant differences in the general costs of goods and services in the comparison communities.

Strengths of the Different Options

In contrast to the other Building Blocks, multiple options can, and often should, be used as part of the same payment system. As shown in Table 4, each option addresses a different issue needed to ensure the adequacy of payment for a provider and the appropriate separation of insurance and performance risk. The greater the degree of bundling defined in Building Block 1, the more likely it is that multiple options in Building Block 4 will need to be used.

Table 4. Goals of The Different Options for Ensuring Adequacy of Payment and Separation of Insurance and Performance Risk

Options For Assuring Adequacy of Payment	Goal of the Option
4–A: Risk Adjustment	<ul style="list-style-type: none"> Ensures payment varies based on systematic and predictable differences in the need for services for different types of patients
4–B: Outlier Payments	<ul style="list-style-type: none"> Ensures higher payment is made for individual patients who need an unusually large number of services or unusually expensive services
4–C: Risk Corridors	<ul style="list-style-type: none"> Ensures payments are adjusted when groups of patients have higher or lower needs than average or when costs of services outside the provider’s control change in unpredicted ways
4–D: Volume–Based Adjustments	<ul style="list-style-type: none"> Ensures payments are adjusted to match changes in average costs as the volume of a particular service increases or decreases
4–E: Setting and Periodically Updating Payment Amounts to Match Costs	<ul style="list-style-type: none"> Ensures payments are updated as changes occur in technology, productivity, prices of drugs and medical devices, evidence about appropriate care, etc.

IV. COMBINING THE BUILDING BLOCKS OF PAYMENT

How Different Combinations of Options Can Achieve Similar Goals

In most cases, there will be multiple ways to combine the Building Block options into a payment reform that would support a specific change in care delivery. As shown in Figure 7, in order to redesign the way care is delivered for a particular patient condition, one can:

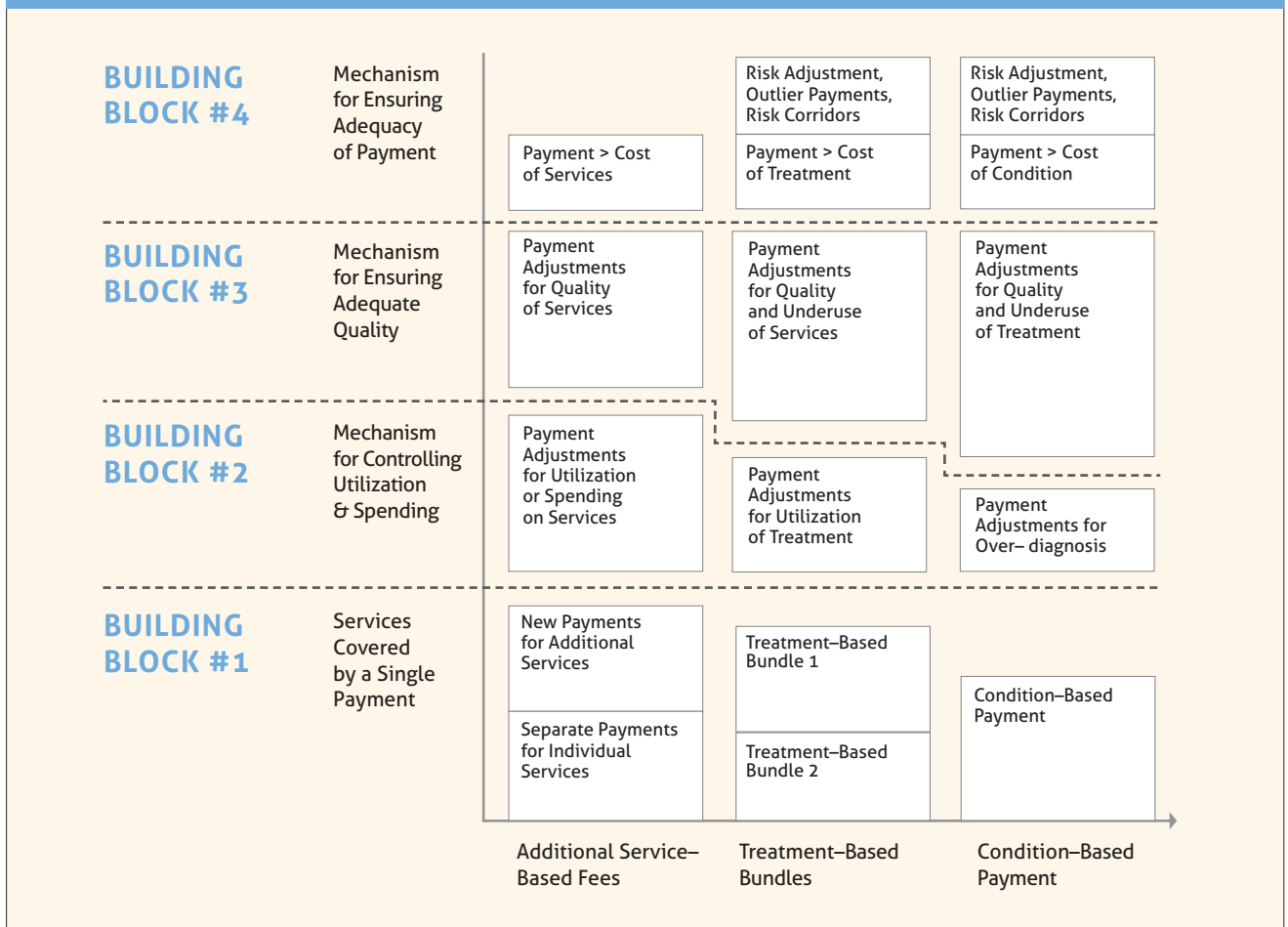
1. Continue to pay for individual services using current fees; create new payments for any unfunded services based on the cost of the services; and adjust payments based on the rate of utilization of services and the quality of the overall care delivered.
2. Pay for each type of treatment using a bundled payment; adjust the payment amounts to avoid over-utilization or poor quality treatment; and risk-adjust payments and make outlier payments and/or use risk corridors to address unusually expensive cases; or

The Building Blocks of Successful Payment Reform: Designing Payment Systems that Support Higher-Value Health Care

3. Pay a single bundled payment for management of the condition; adjust the payment amount to ensure quality of care and avoid under-treatment; and risk-adjust payments and make outlier payments and/or use risk corridors to address unusually expensive cases.

The remainder of this section describes two specific examples of how different combinations of Building Block options could be used to support the same approach to care delivery and overcome the barriers in the current payment system in different ways.

Figure 7. Alternative Approaches to Payment for Managing a Health Condition



Example 1: Improving Chronic Disease Management in Primary Care

Assume that a primary care practice and a cardiology group want to work together to improve care for patients with heart failure. They want to hire nurses to provide more education and self-management support for patients and to identify and address patient problems more proactively and rapidly. They expect to reduce the frequency with which heart failure patients have emergency department visits and hospital admissions related to their condition and to improve the quality of life for their patients.

The physicians have developed a business case analysis which projects that the total cost of care for their patients will be lower than it is today by using the revised approach to care that they have developed. However, they have identified three barriers in the payment systems currently being used by the patients' payers, which make it infeasible for the physicians to implement the changes in care. The barriers include:

- Payers do not pay for education and self-management support services delivered to patients by nurses, for proactive contacts by nurses with patients to verify that they are taking their medications and following other aspects of their treatment plan, or for nurses to take phone calls from patients who are experiencing the early signs of problems, such as fluid buildup or shortness of breath. If the physician practice hired staff to deliver these services, expenses for the physician practice would increase without revenues to cover them, even though the payer would save money on avoided hospitalizations.
- The primary care physicians and cardiologists will not be paid for the additional time they plan to spend in telephone consultations with each other to discuss how to manage patients who are experiencing difficulties, and they will not be paid for extra time they spend working with nurses to address patient problems outside of office visits. The additional time physicians spend on these services will reduce the available time for seeing patients in the office, which in turn will reduce revenues for the practice since the only way the practice can be paid is if the physician sees patients in the office.

- If emergency department (ED) visits and hospitalizations are reduced, the revenues to the hospital in the community will be reduced by more than its costs will decrease, thereby threatening the hospital's already low operating margins.

Table 5 shows four different ways in which these barriers can be overcome by combining different options for each of the four Building Blocks defined in Section III.

Table 5. Alternative Payment Reforms to Eliminate Barriers to Better Care For Heart Failure Patients

Approach to Payment Reform	Services Covered by a Single Payment	Mechanism for Controlling Utilization and Spending	Mechanism for Assuring Desired Quality and Outcomes	Mechanism for Assuring Adequacy of Payment
Approach #1	<ul style="list-style-type: none"> • Create a billing code to allow nurses to bill for time spent with heart failure patients (1-A) • Create a billing code to allow physicians to bill for time spent on issues related to heart failure patients outside of office visits (1-A) 	<ul style="list-style-type: none"> • Reduce payment amounts for the new services if there is an increase in the total combined spending on the newly billable services, existing billable services from the physician practices, and ED visits and hospitalizations for heart failure, after adjusting for any changes in the severity of heart failure among the patients (2-B) 	<ul style="list-style-type: none"> • Survey heart failure patients to measure their quality of life, and reduce payment amounts if quality of life decreases and increase payments if quality of life improves, adjusting for any changes in the severity of heart failure or other comorbidities among the patients (3-B) 	<ul style="list-style-type: none"> • Set payment amounts for nurses and physicians based on expected costs per hour for their time and the likely volume of services (4-E) • Increase the hospital's payment amounts for ED visits and hospitalizations for heart failure patients if the volume declines, based on the hospital's cost per patient (4-D)
Approach #2	<ul style="list-style-type: none"> • Pay a new bundled payment for each heart failure patient to the primary care practice in addition to current fee for service payments for those patients (1-A) • Create a billing code to allow cardiologists to bill for time spent on calls or email contacts with the primary care physicians and nurses (1-A) 	<ul style="list-style-type: none"> • Reduce the amount of the new bundled payment if there is an increase in the total combined spending on the new bundled payment, the individual billed services from the physician practices for the patients, and ED visits and hospitalizations for heart failure, after adjusting for differences in patient characteristics (2-B) 	<ul style="list-style-type: none"> • Reduce the amount of the new bundled payment if quality of life for heart failure patients decreases and increase the payment if quality of life improves, adjusting for any changes in the severity of heart failure or other comorbidities among the patients (3-B) 	<ul style="list-style-type: none"> • Set the bundled payment amount based on expected costs for nursing and physician time needed for patients (4-E) • Adjust the bundled payment amount based on the severity of patients' heart failure and comorbidities (4-A) • Increase the hospital's payment amounts for ED visits and hospitalizations for heart failure patients if the volume declines (4-D)

Table 5 Continued on next page

The Building Blocks of Successful Payment Reform: Designing Payment Systems that Support Higher-Value Health Care

Table 5 Continued. Alternative Payment Reforms to Eliminate Barriers to Better Care For Heart Failure Patients

Approach to Payment Reform	Services Covered by a Single Payment	Mechanism for Controlling Utilization and Spending	Mechanism for Assuring Desired Quality and Outcomes	Mechanism for Assuring Adequacy of Payment
<p>Approach #3</p>	<ul style="list-style-type: none"> • Pay a single bundled payment for each heart failure patient to the primary care and cardiology practices to cover all of the services they provide to heart failure patients (1–D) 	<ul style="list-style-type: none"> • Reduce the amount of the new bundled payment if there is an increase in the total combined spending on the new bundled payment and ED visits and hospitalizations for heart failure, after adjusting for differences in patient characteristics (2–B) 	<ul style="list-style-type: none"> • Reduce the bundled payment amount if quality of life for heart failure patients decreases and increase the payment if quality of life improves, adjusting for any changes in the severity of heart failure or other comorbidities among the patients (3–B) 	<ul style="list-style-type: none"> • Set the bundled payment amount based on expected costs for nursing and physician time needed for patients in both the primary care and cardiology practice (4–E) • Adjust the bundled payment amount based on the severity of patients' heart failure and comorbidities (4–A) • Increase the hospital's payment amounts for ED visits and hospitalizations for heart failure patients if the volume declines (4–D)
<p>Approach #4</p>	<ul style="list-style-type: none"> • Pay a single condition-based payment for each heart failure patient to the primary care and cardiology practices to cover all of the services they provide plus the costs of any ED visits or hospitalizations (1–D) 	<ul style="list-style-type: none"> • The accountability mechanism is provided by the bundled payment itself, i.e., all spending for which accountability is needed is included in the payment (2–C) 	<ul style="list-style-type: none"> • Reduce the bundled payment amount if quality of life for heart failure patients decreases and increase the payment if quality of life improves, adjusting for any changes in the severity of heart failure or other comorbidities among the patients (3–B) 	<ul style="list-style-type: none"> • Set the bundled payment amount based on average expected costs for all physician services and hospital costs at the expected lower rate of ED visits and hospitalizations (4–E) • Adjust the payment amount based on the severity of heart failure and other patient characteristics (4–A) • Provide an outlier payment for patients with unusually expensive hospitalizations (4–B) • Create a risk corridor to protect the practices against large random variations in costs (4–C)

Example 2: Improving Care of Patients with Knee Osteoarthritis

Assume that an orthopedic surgery practice wants to improve care for patients with knee osteoarthritis. The physicians want to reduce costs and improve outcomes for patients who have surgery and encourage more of their patients to pursue non-surgical approaches to dealing with their condition. The practice expects to reduce the cost of performing surgeries, reduce the frequency of complications from surgery, enable patients who do not need or want surgery to have a good non-surgical alternative, and reduce pain and improve mobility for the patients, thereby reducing overall spending while improving outcomes for residents of the community with knee osteoarthritis.

The physicians have developed a business case analysis which projects that the total cost of care for patients with knee osteoarthritis will be lower than today by using the revised approach to care that they have developed. However, they have identified five barriers in the payment systems currently being used by the patients' payers which make it infeasible for the practice to implement the changes in care:

- The physicians do not have the ability to control or coordinate all aspects of the care delivered in conjunction with knee surgery. The surgeons, the hospital, post-acute care providers, and other physicians are all paid separately for their own services, and there is no payment from payers to cover the costs of care management services to coordinate care.
- The hospital is paid more if complications arise that result in a readmission, and the hospital's operating margin will decrease (since its payment will not change, but its costs will increase) if patients are kept in the hospital slightly longer to reduce the need for using expensive post-acute care facilities.
- The orthopedic surgeons and hospital are paid based on the number of surgeries they perform, so performing fewer surgeries will reduce revenues to both the physician practice and the hospital, but their costs will not decrease proportionately because of the need to maintain the operating facilities and the availability of the physicians for emergency cases.

The Building Blocks of Successful Payment Reform: Designing Payment Systems that Support Higher-Value Health Care

- Some of the services that would enable patients to manage their pain effectively without surgery are not paid for or are not paid for at adequate levels, so patients are generally dissatisfied with the outcomes of non-surgical care and want to obtain surgery instead.
- The payment for initial office visits with patients is not adequate to cover the time needed to (1) help patients understand the risks and benefits of surgical and non-surgical approaches and (2) help patients decide which approach is best for them. The payment also does not cover the costs of education materials used to help the patients make these decisions.

Table 6 shows three different ways in which these barriers can be overcome by combining different options for each of the four Building Blocks defined in Section III.

Table 6. Alternative Payment Reforms to Eliminate Barriers to Better Care for Patients with Knee Osteoarthritis

Approach to Payment Reform	Services Covered by a Single Payment	Mechanism for Controlling Utilization and Spending	Mechanism for Assuring Desired Quality and Outcomes	Mechanism for Assuring Adequacy of Payment
Approach #1	<ul style="list-style-type: none"> • Increase the payment to the orthopedic practice for initial office visits with the patient (1-A) • Create a new per-patient payment to support time spent by nurses providing care management services for surgical and non-surgical treatment (1-A) 	<ul style="list-style-type: none"> • Reduce the per-patient payment to the orthopedic practice if total risk-adjusted spending on knee osteoarthritis (including the new care management payment) increases (2-B) 	<ul style="list-style-type: none"> • Reduce the per-patient payment to the orthopedic practice if risk-adjusted patient-reported outcomes are worse (3-B) 	<ul style="list-style-type: none"> • Set payment levels for office visits and the per-patient payment based on the expected time physicians and nurses will spend with patients (4-E) • Increase the hospital's payment amount for surgery if the rate of surgeries for patients with osteoarthritis declines (4-D) • Adjust the measures of total spending and patient-reported outcomes based on the severity of osteoarthritis and other patient factors (4-A)

Table 6 Continued on next page

The Building Blocks of Successful Payment Reform: Designing Payment Systems that Support Higher-Value Health Care

Table 6 Continued. Alternative Payment Reforms to Eliminate Barriers to Better Care for Patients with Knee Osteoarthritis

Approach to Payment Reform	Services Covered by a Single Payment	Mechanism for Controlling Utilization and Spending	Mechanism for Assuring Desired Quality and Outcomes	Mechanism for Assuring Adequacy of Payment
<p>Approach #2</p>	<ul style="list-style-type: none"> • Increase payment to the orthopedic practice for initial office visits with patients (1-A) • Pay a single bundled payment to the orthopedic practice and hospital for all services associated with surgery in place of current individual payments for those services (1-C) • Pay a single bundled payment to the orthopedic surgery practice for all services associated with non-surgical care (1-B) 	<ul style="list-style-type: none"> • Reduce the bundled payments if total risk-adjusted spending on knee osteoarthritis increases (2-B) 	<ul style="list-style-type: none"> • Reduce the bundled payments if risk-adjusted patient-reported outcomes are worse (3-B) 	<ul style="list-style-type: none"> • Set the bundled payment for surgery based on the expected costs for delivering high-quality surgical care (4-E) • Set the bundled payment amount for non-surgical care based on the expected costs of addressing patient pain and mobility problems without surgery (4-E) • Adjust the payment amounts and performance standards based on severity of patient needs (4-A) • Provide an outlier payment for patients with unusually expensive hospitalizations (4-B)
<p>Approach #3</p>	<ul style="list-style-type: none"> • Pay a single condition-based payment to the orthopedic practice for all of the care provided to a patient with knee osteoarthritis, regardless of which type of treatment is used (1-D) 	<ul style="list-style-type: none"> • The accountability mechanism is included in the bundled payment itself, i.e., all spending for which accountability is needed is included in the payment (2-C) 	<ul style="list-style-type: none"> • Reduce the condition-based payment to the orthopedic practice if patient-reported outcomes are worse or do not meet expected levels (3-B) 	<ul style="list-style-type: none"> • Set the condition-based payment amount based on expected costs for surgical care and non-surgical care and the expected proportion of patients who will receive each type of care (4-E) • Adjust the payment amount based on the severity of osteoarthritis and other patient characteristics (4-A) • Provide an outlier payment for patients with unusually expensive hospitalizations (4-B) • Create a risk corridor to protect the practice against large random variations in costs (4-C)

V. TRANSITIONING TO BETTER CARE DELIVERY AND PAYMENT

In general, no one approach to payment reform will be best in every community. There are several reasons for this:

- First, the opportunities to improve care will differ from community to community and from provider to provider. Numerous studies have found that health care services are delivered differently across the country and even within the same community. Since payment reform is a means to an end, i.e., better care delivery, it is important to first determine what kinds of changes in care are needed and then design the changes in the payment system to support the changes in the way care will be delivered.
- Second, providers will differ in their capabilities to manage the various payment options described earlier. For example, physicians who have experience in working together in a coordinated way will be better able to manage a multi-provider bundled payment.
- Finally, the payers in one community may have different capabilities to implement changes in payment systems than those in other communities. For example, some payers have made investments in software and systems so that they can more easily pay providers using bundled payment approaches, while others have not.

Most providers would prefer to have all of their payers paying the same way, and most payers would prefer to pay all of their providers in a common way. However, given the differences in communities, providers, and payers described above, it will be difficult to achieve both of these goals simultaneously, at least in the near term. The key is to ensure that, if different payment systems are used to support a particular aspect of health care in a particular community, each

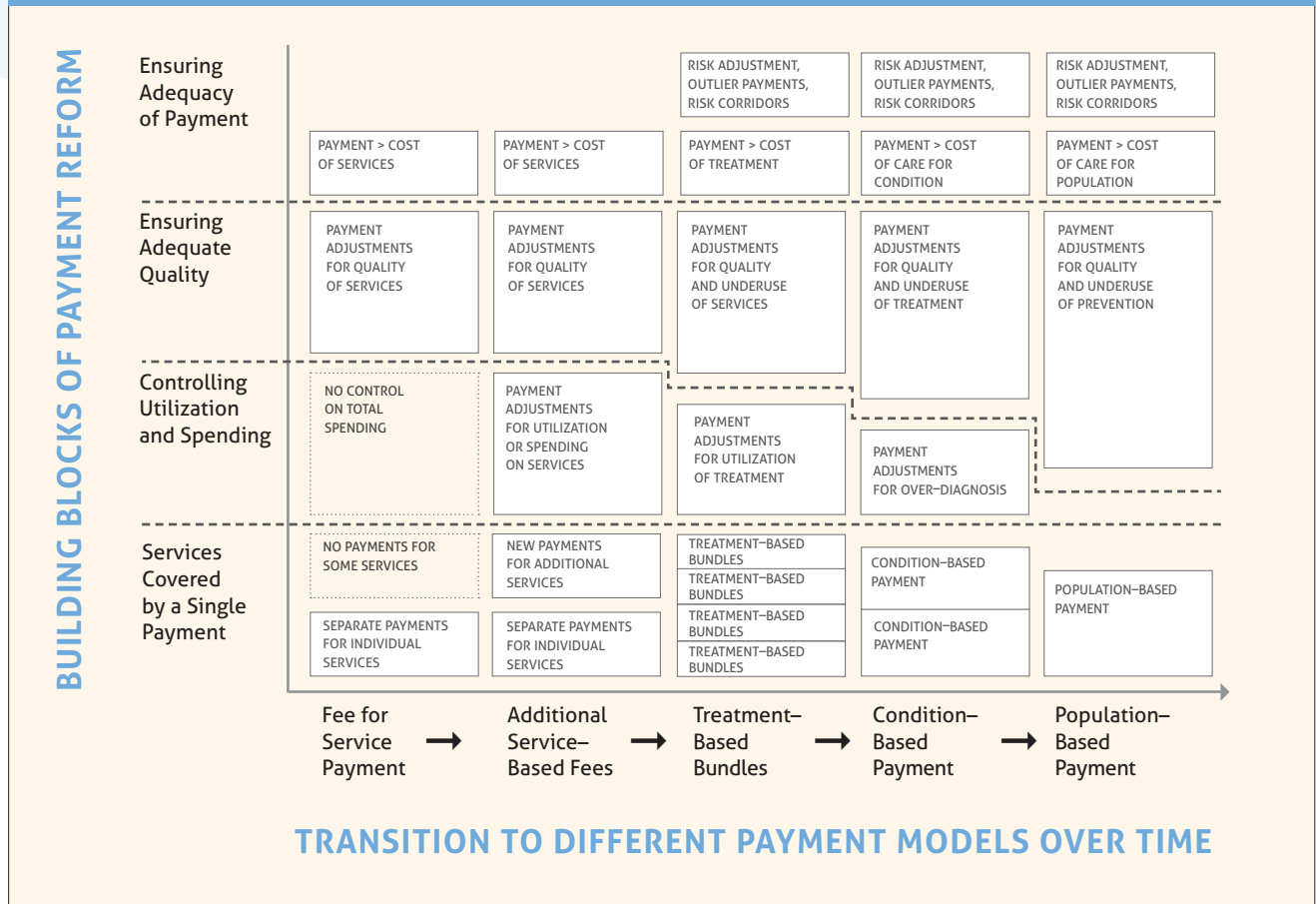
If different payment systems are used by different payers to support a particular aspect of health care in a particular community, each payment system needs to provide the necessary flexibility, accountability, and adequacy to enable providers to successfully deliver high-quality care at an affordable cost.

payment system must provide the necessary flexibility, accountability, and adequacy to enable providers to successfully deliver high-quality care at an affordable cost.

In the examples in Section IV, each of the payment approaches uses different combinations of changes in the four Building Blocks, and each has its advantages and limitations, but each approach accomplishes the goal of creating a payment system that better supports the changes in care that the providers need to make to improve quality and reduce costs. The different options for each Building Block provide the ability to customize a payment system to a specific approach to care delivery, to the capabilities of the providers who will be receiving the payment, to the needs and capabilities of the purchasers and payers who will be making the payments, and to the unique characteristics of the market in which the providers and payers are located.

In addition, the different options described in Section III provide a way to help providers and payers *transition* from the current fee for service system to better payment models over time. As illustrated in Figure 8, a provider and payer might start with more incremental changes, such as new fees for currently uncompensated services combined with targets for reducing avoidable services, and then treatment-based bundles of services could be implemented, followed by condition-based payments and then population-based payments. At each stage, a different combination of mechanisms for controlling utilization/spending and ensuring quality would be needed based on the improvements in quality or outcomes expected, the level of accountability for spending that is built into the payment bundle, and the risks of under-treatment for patients. Providers and payers with greater capabilities to manage bundled payments and accountability mechanisms could move immediately to more advanced steps while others could work to develop those capabilities while still being paid in a way that reduces or eliminates the barriers to better care.²⁹

Figure 8. Transitioning to More Flexible and Accountable Payment Models Over Time



For example, using the example of improving chronic disease management in primary care described in Table 5:

- A group of physicians and a payer could start by using Approach #1, i.e., creating new billing codes for the services that are currently unpaid and creating a pay-for-performance structure designed to ensure that net savings are achieved through reductions in avoidable emergency department visits and hospitalizations.
- After the primary care practice has some experience in delivering the new services with the financial support of the new billing codes, the

The Building Blocks of Successful Payment Reform: Designing Payment Systems that Support Higher-Value Health Care

billing codes could be replaced by a monthly bundled payment as described in Approach #2. This would provide more predictability for the practice and the payer, and it would provide more flexibility for the practice.

- After the primary care practice develops a closer working relationship with the cardiologists and they reorganize services to deliver more coordinated care to patients, they could agree to take the type of monthly bundled payment described in Approach #3 in place of fee for service payments for individual services to heart failure patients.
- After the primary care physicians and cardiologists are comfortable with their ability to manage patient care in order to avoid emergency department visits and hospitalizations and have developed a close working relationship with the hospital, the physicians could agree to be paid through a condition-based payment covering not only their own services but the costs of ED visits and hospitalizations, as described in Approach #4.

In addition to a transition from less-bundled to more-bundled payment models, there will likely need to be a transition process in getting the details right for any individual payment model. Although creating a business case analysis will help in designing the care change and the parameters for a payment system to support it, it is highly likely that some of the data or assumptions used in the business case analysis will turn out to be wrong. The costs of delivering a service may be higher or lower than projected, more or fewer services may be needed than expected, and it may be more or less difficult to achieve the desired outcomes than hoped.

When a provider and a purchaser or payer agree to implement a change in care and a change in payment to support it, they should do so in a collaborative fashion, with the expectation that adjustments will need to be made to ensure that all of the key stakeholders—the provider, the purchaser or payer, and most importantly, the patients—will benefit.

The Building Blocks of Successful Payment Reform: Designing Payment Systems that Support Higher-Value Health Care

Consequently, when a provider and a purchaser or payer agree to implement a change in care and a change in payment to support it, they should do so in a collaborative fashion, with the expectation that adjustments will need to be made to ensure that all of the key stakeholders—the provider, the purchaser or payer, and most importantly, the patients—will benefit. This will generally require neutral facilitation and analytic support to reach agreement on improved approaches to care delivery and payment and to help resolve the problems that will inevitably arise during the implementation process.³⁰

Endnotes

1. Yong PL, Saunders RS, Olsen L. The Healthcare Imperative: Lowering Costs and Improving Outcomes: Workshop Series Summary. Institute of Medicine. 2010.
2. More detail on the Choosing Wisely campaign is available at <http://www.choosingwisely.org>.
3. Miller HD. *Making the Business Case for Payment and Delivery Reform*. Robert Wood Johnson Foundation and Network for Regional Healthcare Improvement. February 2014. Available from <http://www.chqpr.org/downloads/BusinessCaseforPaymentReform.pdf>.
4. In this report, the term “provider” will refer to an individual or organization that delivers health care services to patients. This can include a physician, a nurse practitioner, a physician assistant, a physician practice, a hospital, a home health agency, and any number of other types of organizations. For simplicity, the term “physicians” will be used in this report even though nurse practitioners, physician assistants, nurse midwives, nurse anesthetists, etc. may deliver similar services in some situations.
5. In this report, the term “purchaser” will refer to an individual or organization that serves as the ultimate source of funds to pay for health care services for a patient, and a “payer” will refer to an individual or organization that delivers the payment to a provider. For example, a self-insured business that covers the majority of health care costs for its employees is the primary “purchaser” of care for those employees, but it will likely use a commercial health plan as the “payer” to actually pay claims to the health care providers that deliver services to the business’s employees. In many cases, the patient will also be a purchaser or payer.

The Building Blocks of Successful Payment Reform: Designing Payment Systems that Support Higher-Value Health Care

6. Payment reform demonstration projects are typically carried out on a limited scale using providers selected based on their interest or capability of achieving success, and so the results achieved in the demonstration may not be representative of all those who would participate if the same payment changes were made for everyone. Moreover, there is typically no assurance that a demonstration project will continue after the limited timeframe of the demonstration; this makes it less likely that the providers involved will fundamentally redesign the way they deliver care in response to a temporary payment change.
7. For more information on the CMS Bundled Payments for Care Improvement program, see <http://www.innovations.cms.gov/initiatives/Bundled-Payments/index.html>
8. The payer would need to establish a mechanism for denying payment for any claims that were filed for individual services that were supposed to have been covered by the bundled payment. This could be based on the same mechanism that exists today for implementing the Medicare Correct Coding Initiative, which defines groups of billing codes that should not be paid if another billing code is also billed at the same time. A number of companies now sell software systems to enable payers to distinguish whether a billed service is part of a bundled payment or should be paid separately.
9. For a more detailed discussion of how condition-based payments can be designed and implemented, see the Center for Healthcare Quality and Payment Reform's report *Defining Accountable Payment Models*.
10. This is analogous to current requirements that diagnosis codes be recorded on claims forms in addition to codes indicating the services that were delivered and current limitations on the ability for providers to bill for certain services except when specific diagnoses are present.
11. This does not mean that the same amount needs to be paid in each month or other time period for treatment of the chronic condition; it could be appropriate to provide a higher payment initially and then lower payments on an ongoing basis, and to provide higher payments if and when the condition progressed to a more severe level.

12. See Miller HD. *Measuring and Assigning Accountability for Healthcare Spending*, Center for Healthcare Quality and Payment Reform, August 2014 for a more detailed discussion of the problems with retrospective attribution systems and how to design prospective designation approaches. Available at <http://www.chqpr.org/downloads/AccountabilityforHealthcareSpending.pdf>.
13. When physicians are employed, the medical group, hospital, or health system that employs the physician bills the payer for the services that the physician performs. Since this means that the physicians' employer is responsible for any difference between what can be billed to the payer and what is paid to the physician, most such employers try to ensure that the compensation structure for the physicians is closely related to the method by which the employer is paid for their services.
14. See *Measuring and Assigning Accountability for Healthcare Spending (op cit.)* for a more detailed discussion of issues associated with measuring and adjusting payments based on utilization and spending.
15. In typical shared savings programs, a target spending level is defined, and if actual spending is different from this target, a portion of the difference in spending becomes a payment transfer between the payer and provider. In "upside" shared savings, the payer makes a payment to the provider if savings are achieved (this payment is in addition to any payments for individual services or bundles that the payer makes), and in "downside" shared savings, the provider makes a payment to the payer if spending exceeds the target.
16. If the goal is to ensure that the provider does not shift treatment from services that are included in a bundled payment to services that are not included and that are or can be delivered by other providers, then a pay-for-performance system will generally be more appropriate for controlling that type of shift unless the two providers can work together to manage an overall bundle composed of all of the services.
17. Chernew ME, Mechanic RE, Landon BE, Safran DG. Private-payer innovation in Massachusetts: The 'alternative quality contract.' *Health Aff (Millwood)*. 2011 Jan; 30:151-161.

18. In contrast, some payers are using “tournament” approaches to performance-based payment, in which performance standards are not set prospectively, but retrospectively. In these systems, the performance of all providers is measured and penalties are imposed on those that performed worse than others during the measurement period. Under this system, even if a provider significantly improved its performance or exceeded the average performance achieved by providers in the previous year, the provider could still be penalized if other providers improved more rapidly. This system discourages collaboration achieved by providers to find better ways to deliver care, because the only way a provider can avoid a penalty is if other providers have worse performance.
19. The Geisinger Health System in Pennsylvania has been offering treatment with a “warranty” for many years. See Casale AS, Paulus RA, Selna MJ, Doll MC, Bothe AE, Jr., McKinley KE, et al. “ProvenCareSM”: a provider-driven pay-for-performance program for acute episodic cardiac surgical care. *Ann Surg.* 2007 Oct;246(4):613–21; discussion 21–3. In addition, individual physicians have successfully offered a warranty on their services. See Johnson LL, Becker RL. An alternative health-care reimbursement system—application of arthroscopy and financial warranty: results of a 2-year pilot study. *Arthroscopy.* 1994 Aug;10(4):462–70; discussion 71–2.
20. The “cost to charge” ratio is determined by dividing the total spending by the provider during a period of time by the total billed or billable charges for all of the services the provider delivered during that period of time. The “charge” is the official price the provider has established for the service, not the actual amount of payment the provider receives for that service from payers.
21. Spending can still decrease if the lower volume offsets the effect of the higher payment. The amount of savings will depend on the proportion of fixed vs. variable costs in delivering the service.
22. Miller, HD. From volume to value: Better ways to pay for health care. *Health Aff (Millwood).* 2009 Sept–Oct;28(5):1418–28.
23. Information on the CMS HCC risk adjustment system is available at www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Risk-Adjustors.html

24. See *Measuring and Assigning Accountability for Healthcare Spending (op cit.)* for a more detailed discussion of the problems with commonly-used risk adjustment systems and how to address them.
25. This is also referred to as “aggregate stop loss,” since the threshold for additional payment is based on aggregate spending for a group of patients rather than spending for a single patient.
26. For a more detailed discussion of the mechanisms for separating insurance risk and performance risk in payment systems, see Miller HD. *Ten Barriers to Payment Reform and How to Overcome Them*. Center for Healthcare Quality and Payment Reform; 2013. Available from: <http://www.chqpr.org/reports.html>.
27. Fixed costs include things such as the cost of purchasing or leasing facilities and equipment that will not change based on the number of services or treatments provided. Variable costs include things such as drugs and orthopedic implants that the provider only purchases if they are used for treatment. Some costs could be considered “semi-variable” in the sense that they will not change with small changes in the number of treatments or patients, but will change with larger changes in volume. This would include situations in which multiple staff with the same skills are employed to deliver services, and fewer staff could be employed if fewer services were delivered (e.g., the number of nursing staff on a hospital unit can be changed based on the number of patients on the unit at any given time, but in order to reduce the number of nurses, the reduction in the number of patients has to be large enough to ensure that minimum staffing ratios can still be met with fewer nurses).
28. If a provider has a significant amount of fixed costs associated with delivering a particular service, any system in which the same payment is made for the service for all patients will generate higher profit margins for the provider if the provider delivers the service to more patients (because the payment revenues will increase more than the variable costs will increase), and it will generate lower profit margins or create losses if the provider delivers fewer of the services. This creates a financial incentive for providers to increase volume but it also means that providers are financially penalized if volume declines.

29. The capabilities that providers need to manage bundled payments do not require that the providers be very large or that they be consolidated into a single, integrated organization. There are many examples of small independent physician practices and independent hospitals successfully working together to manage bundled payments and population-based payments. Conversely, consolidation of providers into a single organization can result in higher prices for individual services with no fundamental changes in either care delivery or payment. For more information, see Miller, HD. *The Best Antidote to Provider Market Power is to Change the Healthcare Payment System*. Center for Healthcare Quality and Payment Reform, May 2014. Available at http://www.chqpr.org/downloads/Payment_Reform-The_Antidote_to_Market_Power.pdf.
30. Many communities are providing both neutral facilitation and analytic support through multi-stakeholder Regional Health Improvement Collaboratives. For example, see Miller H, Mitchell E, Hasselman D. *Moving from Quality to Value: Measuring and Controlling the Cost of Health Care*. Network for Regional Healthcare Improvement, January 27, 2015. Available at www.nrhi.org.