



CENTER FOR
HEALTHCARE
QUALITY &
PAYMENT REFORM

Why Value-Based Payment Isn't Working, and How to Fix It

*Creating a Patient-Centered Payment System to
Support Higher-Quality, More Affordable Health Care*

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EXECUTIVE SUMMARY

THE STRENGTHS AND WEAKNESSES OF FEE-FOR-SERVICE PAYMENT

There is broad agreement that the Fee-for-Service system currently used to pay for healthcare services is a major reason why healthcare spending has grown faster than inflation without any corresponding improvement in the quality of care or patient outcomes. It is not just that Fee-for-Service creates a financial incentive for providers to deliver more services; there are actually four distinct problems with Fee-for-Service payment systems that need to be addressed:

Problem #1: Fee-for-Service payment does not assure the services a patient receives are appropriate, high-quality, or achieve the results that the patient needs.

In other industries, customers expect products and services to have a warranty against defects and a money-back guarantee of performance; providing warranties and performance guarantees rewards sellers of high-quality products and services and it encourages clear definitions of the benefits that products and services can and cannot be expected to provide. In contrast, physicians, hospitals, and other healthcare providers are paid for delivering a service regardless of whether the service was delivered in the highest-quality way, regardless of whether the service had positive or negative effects on the patient, and regardless of whether the service was necessary or appropriate for the patient in the first place.

Problem #2: Payment rates are often less than the cost of delivering high-quality, appropriate care. Although there has been considerable attention to the fact that the prices of healthcare services are often much higher than it costs to deliver those services, what has received far too little attention is that many payments are *below* the cost providers incur when they deliver high-quality services only when needed. Because a high proportion of healthcare costs are fixed in the short run, and because fees are based on average costs, providers are financially penalized under Fee-for-Service when they deliver high-quality, appropriate care.

Problem #3: There are no fees at all for many important, high-value services. For example, physicians are only paid for face-to-face visits with patients, even though a phone call or email could avoid the need for more expensive services, and there is generally no payment for services patients receive from nurses and other staff, even though the education and proactive outreach they provide can help patients avoid serious health problems and expensive treatments.

Problem #4: It is impossible for patients or payers to predict the total amount they will need to pay for treatment of a health problem and to compare the amounts across providers. In other industries, customers know the price of the full product before they buy it and they can compare the prices different manufacturers charge for similar products. In healthcare, patients and payers cannot even obtain an estimate of the combined fees for all of the services they will receive to be treated for a health problem, much less a guaranteed price for an entire package of services.

All of these problems contribute to higher-than-necessary healthcare spending and lower-than-desirable quality and outcomes. However, the Fee-for-Service payment system would not have persisted for so long if it had no redeeming features. In fact, Fee-for-Service payment also has four important strengths:

Strength #1: A provider is only paid if a patient receives a service. Although there are clearly serious problems with the quality and cost of the services delivered under Fee-for-Service, the system at least gives patients and payers the confidence that they only pay something if they receive something in return.

Strength #2: Payments are higher for patients who need more services. Although it is true that Fee-for-Service rewards “volume over value,” any payment system that doesn’t adequately support a higher volume of services *when more services are needed* can result in worse outcomes for patients and higher long-run costs.

Strength #3: A provider’s payment does not depend on things the provider cannot control. In other industries, warranties and performance guarantees are typically limited to correcting defects the producer caused or could have prevented. Although Fee-for-Service payment fails to hold providers accountable for problems they caused or could have prevented, it also does not penalize them for things outside of their control.

Strength #4: A provider knows how much they will be paid before delivering a service. Under Fee-for-Service payment, a provider knows exactly what they will be paid for delivering a service before they deliver that service, so the provider can determine whether they are likely to have generate sufficient revenue to cover their costs before they incur those costs.

These four strengths are often taken for granted because they are the aspects of healthcare payment that are most similar to how businesses in other industries are paid. Payment reforms that have failed to preserve these strengths have generally been met with resistance from providers, patients, or purchasers, because they appropriately want to preserve the benefits these strengths provide. The fact that an alternative payment

model is *different* from fee-for-service payment does not necessarily mean it is *better*.

In assessing a “value-based payment” system, one should ask:

1. Are providers accountable for appropriateness, high quality, and outcomes of services for each patient?
2. Do payment rates match the cost of delivering quality care?
3. Do providers have flexibility to deliver the highest-value services?
4. Are patients and purchasers able to determine the total amount they will pay?
5. Are providers only paid when patients receive help?
6. Will patients with greater needs be able to receive more services?
7. Are providers only held accountable for things they can control?
8. Will providers know how much they will be paid before services are delivered?

WHY PAY-FOR-PERFORMANCE PROGRAMS DON'T WORK

The most common approach to value-based payment has been “pay for performance” (P4P). Under most P4P systems, the healthcare provider is still paid using the same Fee-for-Service structure that existed before the P4P system, but the amount of payment for an individual service is modified based on the provider’s performance on measures of the quality of care for the patients.

1. **P4P does not ensure that the services a patient receives are appropriate, high-quality, and achieve the desired results for that patient.** Quality measures are typically defined in terms of the percentage of times that some standard or outcome was achieved for a *group* of patients, not for each *individual* patient, and the measures are defined in terms of the results that the provider achieved for patients in the *past*. The provider is still paid when a service is delivered to an individual patient even if that service failed to meet the standard of quality for that patient. On many common performance measures, 30%-50% or more of patients do not receive the care or achieve the outcomes that performance measures define as desirable. The fact that 60% of patients received the care they were supposed to receive is of little comfort to the 40% of patients who didn’t.
2. **P4P does not ensure that payments are sufficient to cover the cost of delivering quality care.** There is no explicit effort to determine whether the size of a P4P bonus payment matches any increase in costs the provider incurs to achieve higher scores on the performance measures, or to ensure that providers’ essential fixed costs can be supported when avoidable utilization is reduced.
3. **P4P does not give providers the ability to deliver high-value services that are not supported under Fee-for-Service.** Since there is no change to the underlying structure of the Fee-for-Service system, there is still no payment for high-value services for

which fees are not otherwise paid.

4. **P4P does not enable patients or payers to determine the total amount that will be paid for all services to treat a particular condition, or to compare costs across providers.**
5. **Providers continue to be paid only if they help patients with their problems.** Because P4P is just an adjustment to the amounts paid for individual services, a provider still has to deliver a service in order to be paid.
6. **Providers could be paid less for serving patients with greater needs, thereby making it more difficult for high-need patients to obtain care.** Serving higher need patients could reduce a provider’s performance on P4P measures if it is more difficult to achieve good outcomes for these patients, and this would reduce the provider’s revenue for all of their patients.
7. **A provider’s payment does not depend solely on things the provider can control.** Providers are generally not permitted to exclude a specific patient from a performance measure even if the patient has characteristics that contraindicate the recommended actions, if the patient cannot afford what is needed, or if the patient simply refuses to do what is necessary.
8. **The payment amounts are not known before services are delivered.** In most P4P systems, healthcare providers can’t determine how they scored on the performance measures until after the end of the performance period, and one provider cannot receive a bonus unless another provider receives a penalty, so the bonuses and penalties aren’t known until long after care is delivered.

It is not surprising that evaluations have found little or no impact from P4P systems. The problem with P4P systems is not that the “incentives aren’t big enough,” but that P4P systems don’t actually solve the problems with the Fee-for-Service system. P4P programs also introduce undesirable new incentives that could harm patients and they increase administrative burdens on providers that can lead to reduced access and higher prices. No other industry uses the healthcare pay-for-performance model as a way of paying for products or services.

WHY SHARED SAVINGS AND SHARED RISK PROGRAMS DON'T WORK

Two approaches that are being widely used to encourage reductions in healthcare spending are “Shared Savings” and “Shared Risk” (often called “two-sided risk”), in which providers continue to be paid under the standard Fee-for-Service system, but they receive a bonus or penalty if the payer’s total spending on their patients is lower or higher than the amount the payer calculates that it would have spent in the absence of the Shared Savings/Shared Risk program. The bonus or penalty is proportional to the difference between the projected spending and actual spending.

1. **Shared Savings/Shared Risk payment systems do not ensure that services delivered are appropriate, high-quality, and achieve the promised results, and they can actually reward lower-quality care.** Since the method of rewarding or penalizing quality is the same as under P4P systems, there is no assurance of high quality care for any individual patient. Moreover, a provider can actually be paid *more* for delivering *lower* quality care if savings are achieved by failing to deliver services that patients need.
2. **Shared Savings/Shared Risk payment models are unlikely to fully align payments with the cost of delivering quality care.** No explicit effort is made to ensure that the payments a provider receives are adequate to cover the cost of high quality, appropriate care. “Savings” are defined in terms of changes in the amounts the *payer pays*, not the changes in the *provider’s costs*.
3. **Shared Savings/Shared Risk programs may not enable providers to deliver services that are not paid under Fee-for-Service.** There are no direct payments for any services that the Fee-for-Service system doesn’t pay for, and provisions such as minimum savings rates and rebasing of spending benchmarks can preclude the reliable revenue stream that providers need to support high-value services.
4. **Shared Savings/Shared Risk programs do not enable patients and payers to determine the total amount that will be paid for all services to treat a particular condition, or to compare costs across providers prior to the delivery of care.** The calculation of total spending is made after care has already been delivered, and it is an average for a group of patients, not the actual spending for any individual patient.
5. **Providers could be paid more by not helping patients with their problems.** Shared Savings/Shared Risk payments are based on *total spending* on all of the services the patient receives from all providers, so a provider can actually be paid for *not ordering a service* for the patient, even if the service was necessary.
6. **Providers could be harmed financially for serving patients with greater needs.** Delivering more services to an individual patient will increase the provider’s overall average spending per patient, leading to financial penalties. The risk adjustment systems used in Shared Savings/Shared Risk models do a poor job of identifying and adjusting for differences in patient needs that significantly affect appropriate services and spending.
7. **A provider’s payment does not depend solely on things that the provider can control.** Since few patients receive all of their healthcare services from a single physician or other healthcare provider, a Shared Savings/Shared Risk program inherently places providers at financial risk for what other providers do or not do, but without giving them any control over other providers’ actions.

8. **Providers do not know how much they will be paid before services are delivered.** A provider’s Shared Savings/Shared Risk payment depends not only what the provider does for their patients, but also on what other providers do. All of that is determined long after care is delivered.

In light of these problems, it is not surprising that Shared Savings programs have fallen far short of achieving the kinds of savings that had been expected, and that providers have resisted joining Shared Risk programs. In the first three years of the Medicare Shared Savings Program, spending at nearly half of ACOs increased *more* than expected, and less than one-third achieved enough savings to qualify for a shared savings bonus. In each year, after making the shared savings payments, Medicare spent more on services to ACO patients than it would have spent if the program had not existed.

THE STRENGTHS AND WEAKNESSES OF BUNDLED PAYMENTS

In a “bundled payment” program, rather than paying separate fees for every individual healthcare service, a patient or payer pays a single “bundled” price for a combination of two more services. There are many different ways to bundle services, and various forms of bundled payments have existed for decades. However, most current “value-based payment” initiatives have focused on two types of bundled payments:

Procedure-Based Episode Payments, in which a single, pre-defined payment is made to a provider organization for all planned and unplanned services related to the specific procedure or treatment that are delivered to the patient by any provider during a defined period of time (e.g., 90 days after discharge from the hospital where the procedure was performed). For example, in the Medicare program, this includes the Bundled Payments for Care Improvement Initiative (BPCI), the Comprehensive Care for Joint Replacement Program (CJR), and the Oncology Care Model (OCM).

(Global) Population-Based Payments (traditionally called capitation), in which a provider organization receives a fixed payment for each patient every month, and the provider organization is expected to use that payment to pay for all of the planned or unplanned services that the patient receives from any provider during the month. Although this payment system is not used in Medicare, private insurance companies in a number of states, including Medicare Advantage plans, pay some providers using capitation.

1. **Procedure-Based Episode Payments and Population-Based Payments can encourage improvements in some aspects of quality and appropriateness, but they can also create new types of quality problems.** Since treatments for errors or complications must be paid for from the bundled payment, patients and payers receive the equivalent of a “warranty” for any such complications. In addition, there is no financial reward for delivering inappropriate services as part of a procedure or treatment, since the payment does not change based

on which specific services are delivered. However, providers have a financial incentive to withhold necessary services that would not create short-term complications, since the payments are not contingent on outcomes and the provider is only accountable for complications that occur within the time period covered by the payment. Quality measures do not solve this problem, for the same reasons they are not effective in either Pay-for-Performance or Shared Savings/Shared Risk programs.

2. **Procedure-Based Episode Payments and Population-Based Payments may or may not align payments with the cost of delivering quality care.** The amount of the bundled payment is typically determined based on a discount below the average spending per patient under the Fee-for-Service system. However, if fees were too high or too low relative to costs, that mismatch continues under the bundled payment.
3. **Procedure-Based Episode Payments and Population-Based Payments can potentially give providers the flexibility to deliver high-value services for which fees are not available.** A key benefit of a bundled payment system is the flexibility it can give providers to deliver services that are not paid for under Fee-for-Service payment without increasing total spending. However, the fact that the bundled payment is *more* flexible than the current Fee-for-Service system does not necessarily mean that it provides the right *kind* of flexibility. For example, if a Procedure-Based Episode Payment is triggered by the use of a particular procedure in the hospital, there is no flexibility to deliver a different procedure or to deliver the procedure outside of a hospital, even if that would be better or cheaper.
4. **Procedure-Based Episode Payments and Population-Based Payments can enable patients and payers to more easily and accurately determine the total amount they will pay for a particular procedure or for management of all of a patient's health needs, and to compare costs across providers prior to the delivery of care.**
5. **Under Population-Based Payments, providers could be paid even if they fail to help patients with their problems.** Since the payments are not tied to particular treatments or procedures, it is possible for a provider or group of providers to accept a Population-Based Payment for an individual patient without actually helping that patient with their problems.
6. **Under Procedure-Based Episode Payments and Population-Based Payments, providers could be harmed financially for serving patients with greater needs.** Current risk adjustment systems fail to adequately increase payment amounts for patients who have characteristics that could require more procedures or more services as part of a procedure.
7. **Under Procedure-Based Episode Payments and Population-Based Payments, a provider's payment does not depend solely on actions and costs that the provider can control unless the patient is restricted to using that provider's services.** In the Medicare

program, providers in Procedure-Based Episode Payments are not given the ability to control where the patient receives care. In contrast, capitation payment programs in the private sector limit the patient to using the providers who are receiving the capitation payment.

8. **Procedure-Based Episode Payments and Population-Based Payment amounts are not known before services are delivered.** As long as the Procedure-Based Episode Payment system or Population-Based Payment system defines the payment amounts prospectively, the provider receiving the bundled payment will know how much they will be paid before services are delivered.

In contrast to P4P and Shared Savings/Shared Risk payment models, which merely layer incentives on top of the Fee-for-Service system, bundled payments have the potential to correct some of the fundamental problems with Fee-for-Service. However, neither of the most common approaches to bundled payment – Procedure-Based Episode Payments and Population-Based Payments – solve all of the problems of Fee-for-Service payment, nor do they preserve all of its strengths.

No other industry uses “Population-Based Payment” as a way of paying for products or services. In contrast, a Procedure-Based Episode Payment comes much closer to the way businesses in other industries are paid for their products and services than other “value-based payment” systems. However, current versions of Procedure-Based Episode Payments are typically only available for one specific procedure, not for alternative treatments that might be cheaper and better, and the warranties are much shorter and much more limited than what businesses in other industries offer on expensive products and services. Most significantly, however, under current versions of Procedure-Based Episode Payments, the patient and payer still have to pay for the procedure even if it fails to achieve the planned outcome and even if the provider failed to meet minimum quality standards in delivering the procedure.

NARROW NETWORKS, TIERED NETWORKS, AND CENTERS OF EXCELLENCE

Many employers and health plans have created Narrow Networks, Tiered Networks, and Centers of Excellence, in which patients are either required or encouraged to use a subset of healthcare providers that were selected because they offer services at lower cost or higher quality. In general, the providers continue to be paid on a Fee-for-Service basis, so this is typically described as “value-based *purchasing*,” not “value-based *payment*.”

1. **Narrow Networks and Tiered Networks do not ensure that the services an individual patient receives are appropriate, high-quality, and achieve the promised results.** The quality and cost measures used to select the network providers are averages based on the specific health problems and specific services delivered to the patients the providers saw in an *earlier* year. There is no assurance regarding the

quality or cost of care the providers will deliver to patients during the *current* year.

2. **Narrow Networks, Tiered Networks, and Centers of Excellence do not ensure that payments match the cost of delivering quality care.** Providers are often selected based on their willingness to accept a “discount” on their fees for individual services, regardless of whether the discounted fees would be adequate to cover their costs. The presumption is that the provider will offset this discount by seeing more patients, but they may not have the capacity to see more patients, and they could be forced to offset losses by delivering more services to the same patients or charging more to patients of other payers.
3. **Narrow Networks, Tiered Networks, and Centers of Excellence do not give providers the ability to deliver high-value services that are not supported under Fee-for-Service.** Because the providers are still paid under the standard Fee-for-Service system, they will not receive any payment for delivering high-value services that are not eligible for fees.
4. **Under Narrow Networks and Tiered Networks, patients and payers are unable to determine the total amount that will be charged or paid for all services to treat a particular condition, nor are they able to compare costs across providers.**
5. **Under Narrow Networks and Tiered Networks, providers continue to be paid only if they help patients with their problems.**
6. **Under Narrow Networks and Tiered Networks, higher-need patients could have greater difficulty accessing affordable care.** If providers are selected for the network based on their performance on quality or spending measures, a provider that cares for a higher-need set of patients might have worse performance on quality or cost measures and could thereby be dropped from the network.
7. **Under Narrow Network and Tiered Networks, a provider’s payment does not depend solely on things that the provider can control.** The cost and quality measures used to evaluate providers are typically based on some services and costs that the provider being evaluated had no ability to control, so the discounts a provider is forced to accept might bear no relationship to their own performance.
8. **Under Narrow Networks and Tiered Networks, the payment amounts are known before services are delivered.**

Clearly, Narrow Networks and Tiered Networks fail to address the problems of Fee-for-Service payment and may weaken some of its strengths. However, a Tiered Network or Center of Excellence approach could be a desirable complement to a truly effective payment model if it encourages patients to use providers who participate in the improved payment model.

CREATING A PATIENT-CENTERED PAYMENT SYSTEM

None of the “value-based payment” and “value-based purchasing” systems that are commonly being implemented today truly correct the problems with Fee-for-Service payment. Moreover, they can create new problems for patients that do not exist in the Fee-for-Service system, such as risks of under-treatment and reduced access to care, and they can create new administrative burdens for healthcare providers that can also reduce access to quality care or lead to consolidation of providers and ultimately to higher prices for services. It should not be surprising that these payment “reforms” have failed to achieve the desired effects in controlling costs or improving quality and that they have not been enthusiastically embraced by patients or healthcare providers. The cause of the weak results is not that the “incentives” in value-based payment systems aren’t strong enough to “change provider behavior.” Consequently, better results will not be achieved simply by increasing penalties in P4P systems, by adding downside risk to shared savings models, by increasing the magnitude of risk for providers in shared risk models and bundled payments, or by pushing patients and providers into full-risk capitated payment systems. An entirely different paradigm for value-based payment is needed.

Both the Fee-for-Service system and current approaches to value-based payment and purchasing have a common flaw – their central focus is on how to *pay providers for services* or how to *reduce spending for insurers*, not on how to achieve *good healthcare outcomes* for patients at the *most affordable cost* for both patients and their insurers. What is needed is a *patient-centered* payment system that corrects the problems of Fee-for-Service payment while preserving its strengths. A Patient-Centered Payment system would:

- Enable patients to have their specific healthcare need addressed by a team of providers that have agreed to work together to efficiently deliver high quality care and achieve specific, feasible outcomes for that need;
- Enable patients to select which provider team to use based on the quality standards and outcomes that each provider team commits to achieve for that patient and based on the total amount that the patient and their insurer will pay for all of the services the patient will receive with respect to the need that is being addressed;
- Give the team of providers adequate resources and sufficient flexibility to deliver the most appropriate combination of high-quality services to achieve the best outcomes possible given the nature and severity of the patient’s need;
- Hold the team of providers accountable for meeting quality standards and achieving the expected results for each patient in return for the adequate, flexible payment.

How a Patient-Centered Payment System Should Be Structured

A truly Patient-Centered Payment system must customize the method of payment to match what the patient needs as well as what is feasible for providers to manage. Nine types of payments will be needed to adequately address the differences in outcomes and services for four key groups of patient needs:

Preventive Care. Two separate types of payments are needed to support services that help a patient avoid developing new health problems.

1. **A Monthly Preventive Services Management Payment.** A Preventive Care Management Team selected by the patient should receive a monthly bundled payment to provide proactive monitoring of the patient's preventive care needs. The Preventive Care Management Team should be accountable for ensuring that the patient is up to date with all preventive care.
2. **Procedure-Based Bundled Payments for Appropriate Preventive Services.** A Preventive Service Team should receive a bundled payment to deliver all of the services associated with a preventive procedure, and the Team should be accountable for doing so in accordance with quality standards and without any avoidable complications.

Diagnosis and Treatment Planning. Two types of payments are needed to help patients obtain an accurate diagnosis and an objective assessment of their treatment options.

3. **Diagnosis and Treatment Planning Episode Payment.** For common symptoms, combinations of symptoms, and diagnoses where standardized protocols can be used for determining the diagnosis, a Diagnostic Team led by a Diagnostic Coordinator selected by the patient should receive a bundled payment for all of the diagnostic testing and evaluation services necessary to accurately determine the diagnosis for the patient's symptoms and to help the patient understand the treatment options available and decide on a course of treatment.
4. **Diagnosis Coordination and Treatment Planning Payment.** For unusual symptoms, complex combinations of symptoms, and relatively rare diagnoses, a Diagnostic Coordinator selected by the patient should receive a Diagnosis Coordination and Treatment Planning Payment to enable them to arrange and manage all of the examinations, testing, and referrals to other providers that are required to accurately determine a diagnosis and to help the patient decide on a course of treatment. A provider selected by the Diagnostic Coordinator to perform one of the individual services during this process should receive a pre-defined fee or bundled payment for that service.

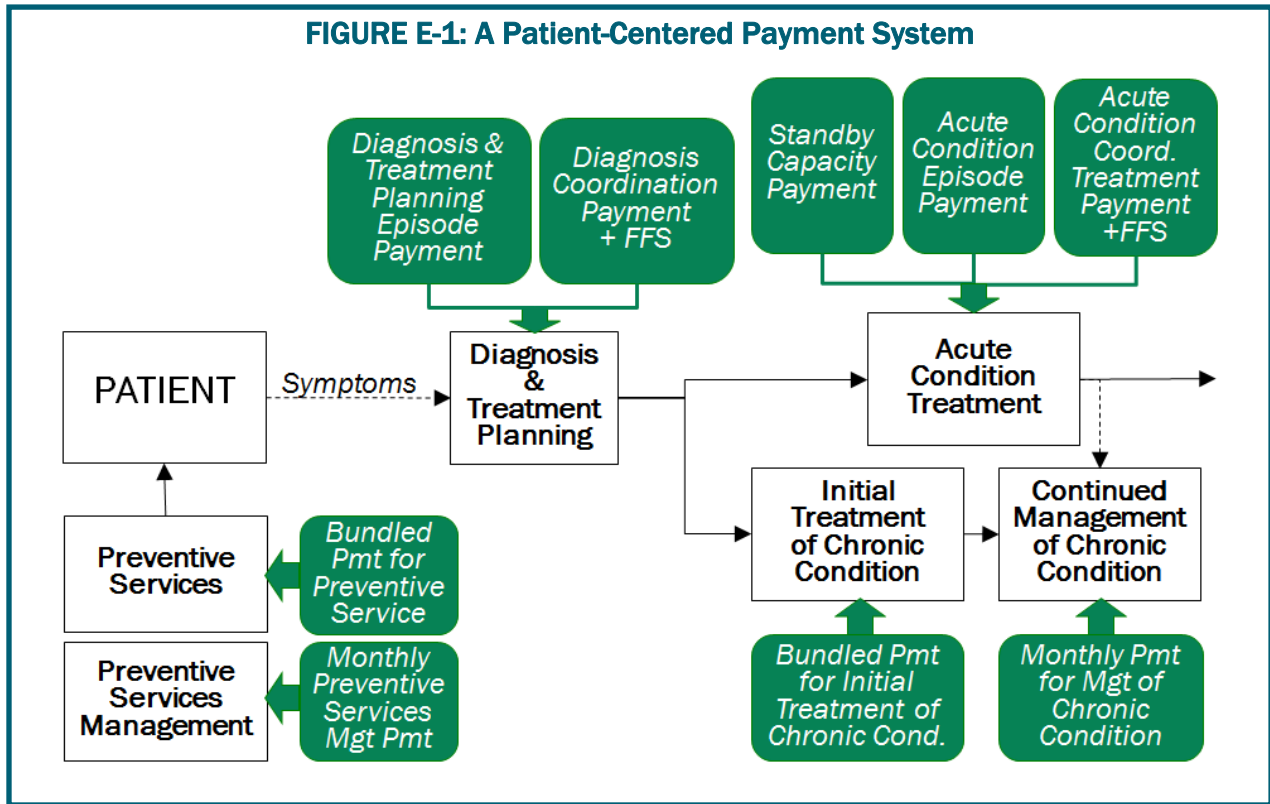
Treatment of an Acute Condition. Three separate types of payments are needed to support treatment services for diagnosed acute health conditions.

5. **Standby Capacity Payment to Support Emergency Services and Other Essential Services.** Hospitals and some other providers in the community where an individual resides should receive a monthly or annual payment for that individual in order to sustain the minimum capacity for emergency services and other essential local services needed in case the individual needs one of those services.
6. **Acute Condition Episode Payment.** When a patient has a common acute condition and no other unusual characteristics, an Acute Condition Treatment Team selected by the patient should receive a one-time bundled Acute Care Episode Payment to deliver all of the treatment needed by the patient for that condition. This Team should be accountable for meeting standards of quality in the delivery of the treatment services, for avoiding complications of treatment, and for achieving pre-defined outcomes for the patient.
7. **Acute Condition Coordinated Treatment Payments.** When a patient has an uncommon acute condition or when a patient has a common condition but has other characteristics that require special approaches for treatment of that condition, an Acute Condition Treatment Team selected by the patient should receive (a) fees for each of the individual services the members of the Team deliver to treat the condition and (b) a Treatment Coordination Payment to ensure that all of the services are effectively coordinated and that quality standards are met.

Management of a Chronic Condition. Two types of payments are needed to provide the care that a patient diagnosed with a chronic condition will need over an extended period of time.

8. **Bundled Payment for Initial Treatment of Chronic Conditions.** When a patient is newly diagnosed with a chronic condition or combination of conditions, a Chronic Care Management Team selected by the patient should receive a one-time or monthly Bundled Payment to deliver initial treatment, education, and self-management support services for a pre-defined period of time. The Team should be accountable for meeting standards of quality in the delivery of the services (including coordinating those services with treatments the patient may be receiving for other conditions), and for achieving short-term outcomes for the patient.
9. **Monthly Bundled Payment for Continued Management of Chronic Conditions.** After initial treatment for a chronic condition or conditions has been completed, a Chronic Care Management Team selected by the patient should receive monthly Bundled Payments to deliver ongoing treatment, education, and self-management support services to the patient. The Team should be accountable for meeting standards of quality in the delivery of the services (including coordinating those services with treatments the patient may be receiving for other conditions), and for achieving both short-term and longer-term outcomes.

FIGURE E-1: A Patient-Centered Payment System



Key Differences Between Patient-Centered Payments and Fee-for-Service

Patient-Centered Payments should be structured in ways designed to correct the major weaknesses of the Fee-for-Service payment system while preserving its key strengths:

- Payments should cover complete bundles of services appropriate to the patient’s needs.
- Payments should be made to Teams of providers that can deliver complete bundles of services.
- Patients should choose Teams rather than individual providers.
- Payment amounts should differ for different health problems.
- Payment amounts should differ for patients with different characteristics and needs.
- Provider Teams should receive additional payments for costs they cannot control.
- Provider Teams should only be paid for services to a patient if quality standards were met and pre-defined outcomes are achieved for that specific patient.
- Care should be coordinated where coordination is most needed.

How Patient-Centered Payments Solve the Problems With Fee for Service While Preserving Its Strengths

1. **Patient-Centered Payments would assure appropriate, high-quality care and good outcomes.** Because payments would be triggered by a specific health condition, there would be no reward for delivering unnecessary services. Moreover, there would be no payment at all if quality standards were not met and pre-defined outcomes were not achieved. Standards and outcomes would be based on evidence as to what a Team could achieve for most patients with a particular condition and other characteristics; the outcome standards would be different for patients with characteristics that made good outcomes more challenging, so that higher-need patients were not precluded from receiving treatment. Teams that were willing to achieve higher standards could commit to those standards in advance and compete for patients on that basis.
2. **Patient-Centered Payments would match the cost of high-quality, appropriate care.** Initial payment amounts would be set based on the costs incurred by Teams that actually deliver high-quality care with good outcomes. The amount of payment the Team would receive for the patients for whom the performance standard was achieved would be set at a level designed to cover all or part of the cost of the services to the patients for whom the standard was not achieved. Moreover, payment amounts would be higher for patients with greater needs. Teams that could deliver equivalent outcomes at lower costs could charge a lower price to attract patients.

3. **Patient-Centered Payments would give providers the flexibility to deliver the highest-value services.** Payments would be tied to the *results* that a Team of providers achieved for one or more specific health conditions, not to the specific *services* that the providers deliver.
4. **Patient-Centered Payments would enable patients and purchasers to predict the total cost of care for specific health problems and compare provider Teams on cost and quality.** For common types of patient symptoms, conditions, and characteristics, Patient-Centered Payments would enable each patient and their purchaser to know in advance the full amount they would have to pay a provider Team for diagnosis of a symptom, for treatment or management of a diagnosed acute or chronic condition, for delivery of preventive care, and for maintenance of emergency service capacity in the community. For uncommon symptoms, conditions, and characteristics, the patient and purchaser would *not* know in advance the exact amount they would have to pay, because the services and costs associated with those patients are *not predictable* by either providers or purchasers.
5. **Providers would only receive Patient-Centered Payments when patients receive help.** A team of providers would only be paid for a specific patient if (a) the patient receives help for the specific condition, symptom, or risk factor the patient has and (b) the help that is provided to that patient meets pre-defined standards for quality and achieves pre-defined outcomes for that patient.
6. **Under Patient-Centered Payments, higher-need patients would be able to receive treatment for their conditions.** Provider Teams would not be discouraged from treating higher-need patients because patients with specific characteristics that made poor outcomes more likely would be placed in a separate payment category, and the quality standards and outcomes for those patients would be based on what evidence showed provider Teams could achieve for patients with those characteristics. A Provider Team that can commit to better outcomes for a category of patients will attract those patients, enabling competition to improve outcomes as well as costs for all patients over time.
7. **Patient-Centered Payments would depend only on what the provider Team can control.** Payments would only be made to a *team* of providers that could control all of the services needed to achieve good outcomes for the condition(s) being treated. Costs that cannot reasonably be controlled by a provider Team, such as the prices of single-source drugs, would be paid for separately by the patient or purchaser.
8. **Under Patient-Centered Payment, the provider Team would know in advance what they would be paid for services.**

As shown in Table E-1, a Patient-Centered Payment system meets the eight criteria for value-based payment better than any of the value-based payment and value-based purchasing approaches currently being pursued by Medicare and other payers. It addresses all four of the major problems with standard Fee-for-Service payments, but it also preserves all four of the strengths of Fee-for-Service payment that have made providers, patients, and even many purchasers reluctant to move to other alternative payment systems.

As shown in Figure E-2, Patient-Centered Payment does much more to provide accountability for outcomes than any current value-based payment models do, and it avoids the risks of both overtreatment and undertreatment that represent serious weaknesses of other value-based payment models.

A Patient-Centered Payment system looks like far less of a radical change if one compares it to the payment systems used to pay for products and services in many non-healthcare industries:

- Patient-Centered Payment delivers patients a “complete product” at a pre-defined price that has been assembled by experts, rather than expecting the patient to choose from a list of services and prices offered by different providers with no assurance they will “fit” together, and rather than allowing providers to deliver and be paid for extra services that may not be needed or wanted by the patient.
- Patient-Centered Payment gives patients a warranty on defects and a money-back guarantee based on pre-defined performance standards. But similar to the limits on warranties in other industries, the provider Teams would be held accountable only for outcomes and costs that they can reasonably be expected to control.
- Provider Teams could compete in setting prices under Patient-Centered Payments to ensure the payment amounts were as low as possible but adequate to cover their costs, and they would compete to offer higher standards of performance.

Transitioning to a Patient-Centered Payment System

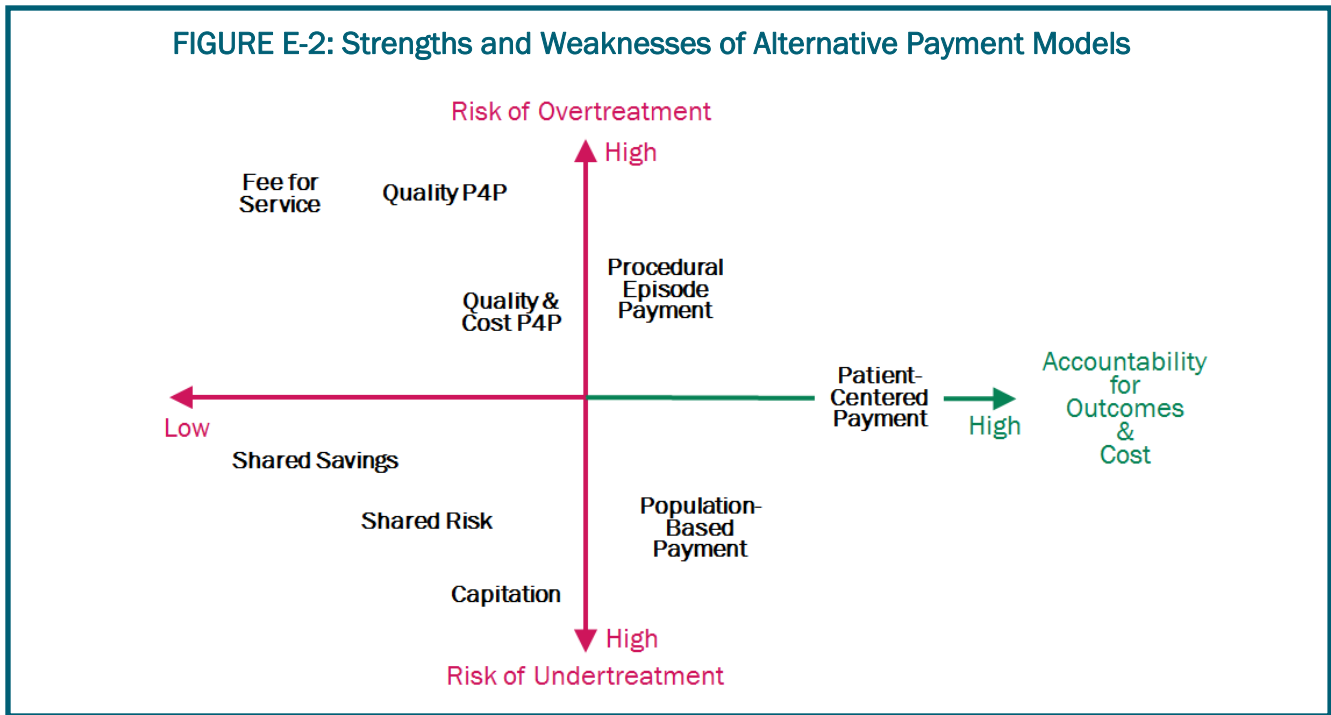
Because a Patient-Centered Payment System represents a significant change from both Fee-for-Service payment and current value-based payment systems such as P4P, Shared Savings, Procedure-Based Episode Payments, and Population-Based Payments, a multi-year transition process will be needed in which the following steps are performed:

- The patient characteristics that significantly affect outcomes and affect the costs of delivering care that achieves those outcomes will need to be identified in order to define patient categories for each type of condition-based payment;
- The performance standards and outcomes expected for different conditions and patients will need to be defined and measured in order for payments to be based on whether those standards and outcomes are achieved;

TABLE E-1: Evaluation of Alternative Payment Models

Desirable Characteristics of a Value-Based Payment System	Fee-for-Service	Quality P4P	Shared Savings & Shared Risk	Narrow & Tiered Networks	Procedure-Based Episode Payments	Population-Based Payment	Patient-Centered Payment
1 Are providers accountable for appropriateness, high-quality, and outcomes of services for each patient?	No	No	No	No	Partially	Partially	Yes
2 Do payment rates match the cost of delivering quality care?	No	No	No	No	Not Always	Not Always	Yes
3 Do providers have flexibility to deliver the highest-value services?	No	No	No	No	Partially	Yes	Yes
4 Are patients and purchasers able to determine the total amount they will pay?	No	No	No	No	For the procedure	Yes	Yes
5 Are providers only paid when patients receive help?	Yes	Yes	Yes	Yes	Yes	No	Yes
6 Are patients with greater needs able to receive more services?	Yes	Not Always	Not Always	Not Always	Not Always	Not Always	Yes
7 Are providers only held accountable for things they can control?	Yes	No	No (Shared Risk)	No	Not Always	No	Yes
8 Do providers know how much they will be paid before services are delivered?	Yes	No	No	Yes	Yes	Yes	Yes

FIGURE E-2: Strengths and Weaknesses of Alternative Payment Models



- The services required to achieve the standards and outcomes and the cost of those services will need to be identified in order to set prices for the condition-based Patient-Centered Payments; and
- The providers that will be involved in delivering the services will need to form Teams, and in order to accept condition-based bundled payments, those Teams will need to determine how they will deliver essential services cost-effectively and how they will allocate the bundled payment among themselves.

It will be impossible to confidently specify all of the parameters of a Patient-Centered Payment System (i.e., category definitions, outcome requirements, and payment amounts) until after the payment system has actually been in place for several years. Consequently, during the transition period, initial parameters for Patient-Centered Payments will have to be established with the full expectation that they will be modified shortly after implementation begins and then modified again on a rapid-cycle basis for a period of time thereafter. During the transition, the goal should be to achieve benefits while avoiding negative impacts on patients, providers, and purchasers so they can continue participating until full implementation occurs.

Once the payment system is fully implemented, competition among providers will enable prices to be reduced and outcome standards to be increased over time, the same way that happens in other industries. Not all providers will need to participate initially, but once the providers participating in the Patient-Centered Payment system demonstrate they can deliver better outcomes at lower costs, patients and purchasers will only want to use providers who can produce similarly high-value results.

To accomplish this, the Centers for Medicare and Medicaid Services (CMS) will need to make significant changes in the way it implements new payment models,

and private purchasers will need to take leadership in working with providers to implement Patient-Centered Payments for commercially insured patients.

CHOOSING THE RIGHT PATH TO THE FUTURE

Health *insurance* will never be affordable unless the cost of health *care* is reduced. Current approaches to value-based payment and value-based purchasing have shown little benefit in terms of either reducing costs or improving quality, while creating heavy administrative burdens for providers and undesirable incentives to deny care to patients. The problematic structure of these approaches makes it highly unlikely that results will improve with more time or by making the incentives bigger, whereas the harms will likely continue to grow.

A better path is to design and implement a Patient-Centered Payment system that is specifically designed to solve all of the problems with Fee-for-Service payment while also preserving its strengths. Patient-Centered Payment supports patient-centered care, which is what patients want to receive and what physicians and many other healthcare providers want to deliver. But unlike current value-based payment models, Patient-Centered Payment also requires the kind of accountability for cost and quality that both patients and purchasers need and that is feasible for providers to accept.

Successful implementation will require a multi-year transition process, and all of the stakeholders in healthcare – providers, purchasers, and patients – will need to work together collaboratively to ensure success. Individual communities that want to move forward quickly should be encouraged to do so and they should receive the support they need, rather than being forced to wait for a one-size-fits-all national approach.

I.

THE QUEST TO PAY FOR VALUE INSTEAD OF VOLUME

There is broad consensus that the use of fee-for-service payment for healthcare services is a major reason why healthcare spending has grown faster than inflation without any corresponding improvement in the quality of care or patient outcomes. In response, a variety of “value-based payment” and “value-based purchasing” systems have been implemented in an attempt to slow the growth in spending and accelerate improvements in quality.

The Failure of Current Value-Based Payment Approaches to Produce Higher-Value Care

The most commonly used approach to value-based payment has been “pay-for-performance” (P4P). P4P programs pay bonuses to healthcare providers or impose penalties on them in order to encourage better performance on measures of quality and spending. However, P4P programs have not had significant impacts on either quality or cost. A 2017 summary of nearly six dozen studies concluded that pay for performance programs had not consistently demonstrated improved health outcomes in any setting.¹ Despite these poor results, both the Medicare program and most commercial health plans have not only continued but expanded the use of pay-for-performance programs.

Concerns about the limitations of pay-for-performance has led to growing interest in “alternative payment models,” commonly referred to as APMs. In 2015, the Secretary of Health and Human Services announced a goal of moving 50% of Medicare payments into APMs by 2018. A few months later, in the Medicare Access and CHIP Reauthorization Act (MACRA), Congress included not only provisions designed to encourage physicians to participate in alternative payment models but also processes through which they could design APMs themselves.²

In 2017, the largest alternative payment model in the Medicare program was the Medicare Shared Savings Program (MSSP), which makes “shared savings” payments to healthcare providers who have formed “Accountable Care Organizations” (ACOs). So far, however, shared savings ACOs have fallen far short of achieving the kinds of savings for the Medicare program that had been expected. In the first three years of the Medicare Shared Savings Program, spending at nearly half of ACOs increased *more* than expected, and less than one-third achieved enough savings to qualify for a shared savings bonus. In each year, after making the shared savings payments, Medicare spent more on services to ACO patients than it would have spent if the program had not existed. In other words, the ACO program made healthcare services even less affordable.³

Many believe that value-based payment programs have had only weak results to date because the financial incentives they create for providers have been too small. To address this, payers have been encouraged to create larger penalties in P4P systems, add downside risk to shared savings models, and implement bundled payments and population-based payments that shift significant financial risk to providers.

However, there is also growing concern that current approaches to value-based payment are not just ineffective, but may actually be harmful:

- The measures of quality and spending used in pay-for-performance and shared savings models can penalize physicians, hospitals, and other providers that provide care to patients who have complex conditions or risk factors that require more healthcare services or make it harder for providers to achieve good outcomes.⁴ Those penalties can make it more difficult for such patients to find providers willing to treat them.
- Both physicians and hospitals report that pay-for-performance programs have increased their administrative costs,⁵ physicians complain they have less time to spend with patients and less satisfaction with practicing medicine,⁶ and many small physician practices and hospitals have closed.
- The fact that Medicare and other payers are indicating that physicians and other providers will need to accept significant financial risk in order to participate in alternative payment models is creating an additional impetus for physicians to seek employment with hospitals and for small hospitals to merge with larger hospitals.⁷

These trends can reduce access to care for patients and cause higher prices for both patients and healthcare providers, thereby resulting in *lower-value* healthcare rather than *higher-value* care.

The Need for a Fresh Look at the Problems with Fee-for-Service and How to Solve Them

Will strengthening and expanding current approaches to value-based payment achieve the kinds of improvements in quality and affordability the nation needs, or is there a different approach that might achieve better results, and do so more quickly?

The first step in answering this question is gaining a thorough understanding of the problems with fee-for-service payment. Section II explains that there is not just one problem with fee-for-service payment but *four* very different problems that result in poor quality of care and high healthcare costs. A value-based payment

system that addresses only one or two of these problems will have less impact on quality and cost than a payment system that addresses them all.

However, Section II explains that there are also four *strengths* of fee-for-service payment that benefit patients and payers, not just providers. Value-based payment systems that fail to preserve these strengths can have serious negative impacts on quality, access, and cost.

The relative impact that a particular approach to value-based payment is likely to have on quality and costs can be determined by assessing the extent to which it addresses all of the problems with fee-for-service payment while also preserving its strengths. Sections III-VI examine each of the four major approaches to value-based payment that are currently being used and evaluate their ability to improve on the fee-for-service system:

- Section III shows why Pay-for-Performance programs, which award small bonuses or impose small penalties on providers, have resulted in so little improvement in the quality of healthcare services and have had undesirable effects on providers and patients;
- Section IV explains why Shared Savings/Shared Risk programs, which allow healthcare providers to retain a portion of savings they generate and/or require them to pay for a portion of increases in spending, cannot adequately address the weaknesses of fee-for-service payment and also create serious new problems that fee-for-service doesn't have;
- Section V examines the many different types of Bundled Payment programs, which pay a single amount for related services delivered by multiple healthcare providers. It shows how the most common approaches – Procedure-Based Episode Payments and “Population-Based Payments” – fail to address all

of the problems of fee-for-service while also causing negative impacts on both patients and providers; and

- Section VI examines Narrow Networks, Tiered Networks, and Centers of Excellence, in which patients are encouraged or required to use specific healthcare providers that payers determine have higher quality or lower cost. Since these “value-based purchasing” approaches do not actually change the way providers are paid, they cannot have much impact by themselves on the problems caused by fee-for-service payment, and they may also make access and coordination of care more difficult.

The analyses in Sections III-VI make it clear that the problems with current value-based payment and value-based purchasing approaches will not be solved simply by increasing the magnitude of the incentives or risk. Instead, an entirely new approach to value-based payment is needed.

Section VII describes how a Patient-Centered Payment system can be designed that will address all of the problems of the fee-for-service system, while also preserving all of its strengths. Because a Patient-Centered Payment System would represent a very significant change from fee-for-service payment and from current value-based payment programs, Section VIII explains how the transition can be made in a way that is feasible for both providers and payers.

II.

THE NEED TO CHANGE FEE-FOR-SERVICE PAYMENT

A. What Exactly is Wrong With Fee for Service?

Although there is widespread agreement that fee-for-service payment⁸ is undesirable because it “rewards volume over value,” many people have misinterpreted this to mean there is only one problem with fee for service. In fact, that phrase was intended to summarize several interrelated problems that need to be solved in order to move “from volume to value.”⁹

In order to create a healthcare system that delivers significantly higher-quality care at a much more affordable cost, there are four distinct problems with current fee-for-service payment systems that need to be addressed:¹⁰

- Fee-for-service payment does not assure that the services a patient receives are appropriate, high quality, or achieve the results the patient needs;
- Fee-for-service payment rates are often less than the cost providers incur in delivering high-quality, appropriate care;
- There are no fees at all for many important, high-value services; and
- It is impossible for patients or payers to predict the total cost of treating a health problem and to compare the costs across providers.¹¹

These problems are inter-related in ways that make it difficult or impossible to solve one without also solving the others. A key reason that most value-based payment and purchasing initiatives have produced disappointing results is that they have tried to solve only a subset of these problems without addressing the others.

Problem #1: Fee-for-Service payment does not assure the services a patient receives are appropriate, high-quality, or achieve the results that the patient needs

In industries other than healthcare, customers generally expect sellers to offer their products and services with a warranty against defects, i.e., if the product malfunctions or a mistake is made in delivering a service, the error or defect will be fixed or the product will be replaced at no additional charge. Many sellers also offer a money-back guarantee of performance, i.e., if the product or service does not achieve the result expected, the customer will not have to pay or will get their money back.¹² This system rewards sellers of high-quality products and services, and it encourages clear definitions of the benefits the products and services can and cannot be expected to provide.

In contrast, typical fee-for-service systems in healthcare pay physicians, hospitals, and other healthcare providers for delivering a service regardless of whether the service was delivered in the highest-quality way, they are paid regardless of whether the service had positive or negative effects on the patient, and they are paid regardless of whether the service was necessary or appropriate for the patient in the first place.

For example, if a patient who has back pain is admitted to a hospital for spinal surgery, the hospital and surgeon will be paid for the surgery whether it resolves the patient’s back pain or not. If an error during surgery leads to an infection or complication that requires the patient to be readmitted to the hospital and undergo surgery again, the patient and their health insurer would generally be charged by the hospital, the surgeon, the anesthesiologist, the radiologist, etc. for the second hospitalization and surgery as well as for the first surgery.

This system does not reward providers who deliver appropriate, high quality care that achieves good outcomes. In fact, it can penalize providers financially because a physician, hospital, or other provider that delivers services only when appropriate and/or delivers services in a way that avoids complications will receive lower revenues than a provider that delivers unnecessary services and/or has a high rate of complications. Penalizing providers financially for improving quality is unlikely to encourage investments in quality improvement that could help to reduce healthcare costs and improve patient outcomes.

Problem #2: Fee-for-Service payment rates are often less than the cost of delivering high-quality, appropriate care

In industries other than healthcare, a business will not survive for long if its customers are not willing to pay a price that is higher than or equal to what it costs the business to produce its products or services. In addition, in industries where there is freedom to compete on price, prices that are significantly above costs will not persist because they will encourage entry of new businesses that are willing to offer lower prices.

In contrast, in healthcare, there is often little relationship between the price of a service and what it costs to produce it. There has been considerable attention to the fact that many healthcare prices are higher than costs, and that consolidation of provider organizations has led to higher prices and higher spending with no corresponding improvements in quality or outcomes.¹³ This a serious problem, but it is due to the market power of providers, not to the use of fee-for-service payment.

Monopoly healthcare providers could charge excessively high prices under any payment system.¹⁴

What has received far too little attention is that there are many cases in which the fees patients and payers pay in healthcare are *below* the cost of delivering those services in a high-quality way. There are three key reasons that fees for services are often below the cost of delivering appropriate, high-quality services:

a. Fees Are Set Based on Average Costs Without Concern for Quality.

In the Medicare program, a standard payment amount is established for each service delivered by a particular type of provider (e.g., a physician practice, a hospital, etc.), and Medicare pays that same amount each time the service is delivered. In general, the amount of payment for a service is supposed to reflect the average cost of delivering that service. However, as noted under Problem #1, there is no assurance of *quality* in the delivery of a service, so both high-quality and low-quality services are included in the average. Since it is likely more expensive for a provider to deliver an individual service in a higher-quality way,¹⁵ an average based on both high-quality and low-quality services will often be below the cost of the high-quality services. As a result, a healthcare provider that delivers a higher-quality service may not be paid enough to cover its costs, while lower-quality providers may make a profit. The perverse result is a financial reward for the lower-quality providers.

b. Fees Are Set Without Regard to Appropriateness.

Not only will the average cost of services depend on the level of quality in those services, the average will depend heavily on how many patients receive the service from the provider. This is because, in general, most healthcare providers incur significant fixed costs to deliver a particular service, i.e., a large portion of their costs do not vary depending on how many services they deliver. For example, a hospital has to have its emergency department (ED) ready to respond to emergencies on a 24/7 basis, and many of the costs the hospital incurs are the same regardless of how many emergency visits the hospital actually has. This means the hospital's revenues for the ED can be significantly higher or lower than the cost of operating the ED depending on how many visits there are.

Physician practices also have significant fixed costs, since a practice has to pay the same amount for its office, equipment, and the salaries of its core staff regardless of how often patients actually visit the practice or how many services the patients receive. Since the practice is paid the same amount for each visit or service no matter how many visits or services it delivers, the practice's revenues can be higher or lower than its costs depending on how many services patients receive. The amount of a practice's costs that are fixed can vary significantly depending on the nature of the

services provided. For example, a radiation oncology practice has to own or lease multiple types of expensive radiation therapy equipment, and these costs are the same regardless of how many patients are treated. Consequently, if the practice delivers fewer treatments, the average cost per treatment may be higher than the amount it is paid per treatment, causing significant financial losses. In contrast, a significant portion of the costs that a medical oncology practice incurs in delivering chemotherapy treatment are the costs of the individual drugs, and most of those costs will decrease in proportion to the number of patients treated.¹⁶

Because there is no assurance that services will only be delivered when they are *necessary*, if fees are set based on the average costs of all providers will be lower than what would have been calculated by just averaging the costs of providers who deliver services only when necessary. This means providers who deliver additional, unnecessary services will have higher margins than providers who deliver care appropriately, and providers who deliver only appropriate services may not be able to sustain their operations.¹⁷

c. Fees Are Set Without Regard for the Higher Costs Some Providers Incur in Delivering Services.

In the Medicare program, all providers who deliver the same service receive essentially the same fee. Yet for many types of services, it will inherently cost more to deliver those services in a small or rural community than in a larger community simply because the number of patients in the community who need the service will be less than the minimum capacity of the equipment and personnel that any provider will require in order to deliver the service. In some cases, it may be feasible for patients who need a service to travel to a larger community where fixed costs can be spread over a larger volume of (appropriate) patients, but in many cases it will not be feasible for patients to travel. Prices for many services in rural areas will therefore need to be higher, not because the providers are less efficient, but because the bare minimum capacity required to deliver *any* services in these communities will be more than what is needed to serve the only patients available to use the capacity.

How Fee for Service Penalizes Reduction of Unnecessary Services

In general, no matter what payment amount is chosen, because the *payment* per service is fixed but the *cost* per service changes based on volume, the provider's profit margins will be lower when fewer services are delivered and profit margins will be higher when more services are delivered. While this creates a financial reward to deliver unnecessary services, it also creates a financial *penalty* for delivering a *lower* volume of services, even when the services being eliminated were unnecessary or even harmful. Many payers have

EXAMPLE 1: IMPACT OF PATIENT VOLUME ON EMERGENCY DEPARTMENT OPERATING MARGINS

A small hospital emergency department in a rural community employs one emergency physician on each shift. Each physician is paid a salary of \$300,000 per year, works 40 hours per week and 50 weeks per year, and can provide high-quality care for up to 2-3 patients each hour. If each physician saw 2.5 patients every hour on every shift, the hospital would have to be paid at least \$60 per visit just to cover the physician's salary. (The actual payment would need to be higher to cover the other costs incurred by the hospital beyond the physician's salary.) However, if this is a rural community with an average of only one patient visit every hour, the hospital would have to be paid at least \$150 per visit just to cover the physicians' salaries. In very rural areas, the emergency department might only see a few patients during the entire day; if there was only one patient for a physician to see during each shift, the hospital would need to receive at least \$1,200 per visit just to cover the physicians' salaries. The physicians' salaries are a *fixed* cost, since a physician needs to be available whether there are any patients or not, so the cost per visit depends heavily on how many patients there are. In 2017, Medicare paid about \$120 for a Level 4 visit with an emergency physician, which is only one-tenth as much as would be needed to cover a physician's salary in the smallest emergency department, even though that payment amount might be adequate to cover the salary and other costs in a busy ED. The small rural hospital could try to reduce its costs by using non-physician clinicians and by having clinicians on call during evenings rather than physically present, but there would be no way for these changes to reduce Emergency Department costs by 90% while still providing adequate and timely emergency care.

Physician Compensation: \$300,000

Hours Worked Per Year: 2,000

Cost Per Hour: \$150

Patients Per Hour	Cost Per Visit	Payment Per Visit	Profit/Loss
3.0	\$50	\$120	\$70
2.5	\$60	\$120	\$60
2.0	\$75	\$120	\$45
1.0	\$150	\$120	(\$30)
0.5	\$300	\$120	(\$180)
0.25	\$600	\$120	(\$480)
0.125	\$1,200	\$120	(\$1,080)

created prior authorization programs¹⁸ in an effort to counteract the financial incentive to deliver unnecessary services, but prior authorization programs do nothing to counteract the financial penalties providers experience when fewer services are used, and they can also prevent some patients from receiving a treatment they need.

The fact that costs decrease and profits increase with higher volume is not unique to healthcare; the same rule holds in most industries. In manufacturing, when more products are sold, the fixed cost of the manufacturing plant and equipment can be spread across a larger number of products, reducing the average cost of each product and increasing the manufacturer's profits. As the cost decreases, the manufacturer can choose to reduce the price, encouraging even more sales and even higher profits. In manufacturing, this is a virtuous cycle. In healthcare, it is not, because success in healthcare is keeping people healthy so they need *fewer* healthcare services. In manufacturing, a fixed price for each product rewards the manufacturer with higher profits for successfully selling more products, but in healthcare, the fixed fee for a service penalizes a healthcare provider for keeping a patient healthy.

How the Financial Risk for Providers in Fee for Service Can Increase Spending for Payers

A healthcare provider in the Medicare program faces an additional financial risk that businesses in other industries do not face, namely, Medicare providers

cannot set their own prices. A business that cannot set its prices cannot ensure it will be paid enough to cover its costs. Proponents of creating "risk-based" alternative payment models imply that a weakness of fee-for-service payment is a lack of financial risk for providers. In reality, though, there is significant financial risk for a provider under the Medicare fee-for-service system because the fixed fees in Medicare will not cover costs if the provider does not have a sufficiently large volume of patients. Since the provider cannot charge higher prices to cover the higher average cost per service when fewer services are delivered, the only way it can mitigate its risk is to deliver more services, including when those services are not really necessary. That can lead to higher total spending by Medicare than if the provider had been able to charge a higher price for the necessary services.¹⁹ It can also lead to higher prices for payers other than Medicare where the provider has the flexibility to raise prices for other payers, but in that case, the other payers are paying more to subsidize underpayment by Medicare, not to cover the actual costs of services their members are receiving.

The real problem with fee-for-service payment in Medicare is not a lack of financial risk, but the fact that a provider has a high risk of financial losses by trying to deliver higher-quality, more appropriate care to patients.

Why Negotiated Fees May Not Solve the Problem

Outside of the Medicare program, payment amounts are generally negotiated between health plans and providers. In theory, this negotiation process could enable paying higher amounts to high-quality providers that have higher costs due to low volumes of patients and it could enable paying lower payment amounts to providers that deliver low-quality care or deliver high volumes of inappropriate services. However:

- Large payers often use their market power to force small providers to accept discounts that are much larger than any economies of scale the providers could achieve through higher volumes. This exacerbates the problem of low payment rates for small providers rather than solving it; and
- Large providers with sufficient market power often demand payment amounts that significantly exceed their costs. This takes resources that could otherwise be used to cover the legitimately higher costs of small providers.
- Moreover, even in the private sector, once payment rates are set, they are generally fixed for the contract period, so there continues to be at least a short-run reward for increasing volume and a penalty for reducing volume.

Problem #3: There are no fees at all for many important, high-value services

In most industries, if a business develops a product or service that customers find valuable, it can produce that product or service and sell it at a price designed to cover its costs. In contrast, in healthcare there isn't any fee at all for many high-value services, including services that can prevent or avoid the need for other, more expensive services. For example,

- Physicians generally aren't paid to respond to a patient's phone call about a symptom or problem, even though this could help the patient avoid the need for far more expensive services, such as an emergency department visit. Physicians also aren't paid for proactive telephone outreach to high-risk patients to ensure they get services that could prevent serious health problems or identify problems at earlier stages when they can be treated more successfully and at lower cost.
- Primary care physicians and specialists aren't paid for the time they spend communicating with each other to coordinate a patient's care, even though this can avoid ordering of duplicate tests and prescribing conflicting medications. Similarly, a physician is not paid for the time spent serving as the leader of a multi-physician care team, even if coordination of the other physicians results in better outcomes for the patient.
- Physicians aren't paid more for spending additional time in a shared decision-making process with patients and family members to explain multiple treatment options, even though this has been shown to reduce the frequency of invasive procedures and low-value treatments.²⁰

- There is generally no payment for services that patients receive from nurses and other non-clinician staff, even though the education and proactive outreach that non-clinicians provide to patients and family members can help patients manage their health problems more effectively and avoid hospitalizations.
- There is no payment for providing palliative care for patients in conjunction with treatment, even though this can improve quality of life for patients and reduce the use of expensive treatments.
- There is no payment for "standby" services that hospitals and physicians provide, such as having an emergency room staffed and ready to quickly handle accidents, having a cardiac catheterization suite staffed and ready to quickly treat heart attacks, etc., even though rapid response time can reduce disability and subsequent healthcare costs.
- There is no payment for providing non-health care services (such as transportation to help patients visit the physician's office) which could avoid the need for more expensive medical services (such as the patient being taken by ambulance to an emergency department).

Failure to pay for these kinds of services leaves a healthcare provider with two choices:

- They can deliver only the specific services for which they will be paid, which in turn results in care that is more expensive and lower quality than it could be; or
- They can deliver the desirable services without compensation and try to make up the losses by delivering more of the other services for which payments are available, perhaps sacrificing quality or appropriateness in order to increase volume. This also results in care that is more expensive and lower quality than it needs to be.

This problem and Problem #1 are the basis of the frequent criticism that fee-for-service rewards sickness rather than health.

It might be argued that failing to pay for these high-value services is not a problem inherent in fee-for-service payment, but rather is a result of the choice Medicare and private plans have made not to pay for certain services. But even if payers paid for all of the services described above, a provider that developed an innovative new service would still not be paid for that service, no matter how valuable it was, until a new billing code was created and until the associated fee amount was incorporated into its contracts with each payer. Moreover, because of federal requirements that physician payments be "budget neutral," paying for a new type of physician service requires reducing the payment rates for all other physician services, even if the new type of physician service would achieve an equal or greater amount of savings on hospital services and post-acute care services.

Problem #4: It is impossible for patients or payers to predict the total amount they will need to pay for treatment of a health problem and to compare the amounts across providers

In other industries, most customers prefer to buy a complete, functioning product assembled by a manufacturer, rather trying to choose the correct set of parts from a list and assemble the product themselves. Moreover, the customer either knows the price of the full product before they buy it, or if custom assembly of a product is required, the customer receives an estimate of the total cost of the product before the work is undertaken. Using these prices or estimates, customers can compare the price charged by one manufacturer or contractor to the price charged by others before deciding which to buy. They will also be told whether there is a warranty on the product and the limitations on that warranty, so they can estimate how much more they may need to spend on repairs and replacement and so they can compare the warranties offered by different manufacturers.

In the healthcare system, for all but very simple health problems, most patients will receive two or more separate healthcare services to address a problem, and each of those services will be paid for with separate fees. Those services may be delivered by different healthcare providers on the same day, or by the same or different providers on different days, in some cases over an extended period of time. Some of the services may be necessary and others may not, and some of the services may be needed to address problems created by poor-quality delivery of other services.

In general, the patient (and any third-party payer who is supporting their care) cannot even obtain an estimate of the combined fees for all of these services, much less a guaranteed price for the entire package of services. This is not because every patient receives a different set of services. There are many types of health problems and preventive care needs where the exact same combination of services is provided to most or all patients, yet it is still difficult to find out in advance what that standard combination will cost. If the provider decides to deliver unnecessary services to the patient, or if the provider causes an infection or complication that requires additional treatment services, the patient will be billed for those unnecessary or additional services. As a result, there is no way for the patient to accurately compare two providers based on the cost of the services the patient will receive.

The Limitations of Efforts to Promote “Transparency” in Pricing Under Fee-for-Service

There are a growing number of efforts across the country to promote “transparency” in healthcare service pricing. In many cases, this involves healthcare providers informing patients in advance about the prices the providers will charge for individual healthcare services. However, even if the patient knows what individual services will

cost, they typically don’t know all of the services they will actually receive until after their care has been completed. For example, knowing the price that a gastroenterologist will charge or the amount they will be paid for performing a colonoscopy doesn’t tell the patient whether an anesthesiologist will be involved and how much they will need to be paid, how much the pathologist will charge if a biopsy is needed, and how likely the patient is to experience bleeding and what it will cost to address that. A patient might choose a gastroenterologist who charges less only to find that the total payments for all of the services the patient received are much higher than what the patient would have paid if they had used a gastroenterologist who charged more themselves,

Some transparency efforts have attempted to avoid this problem by reporting on what providers have been paid for total “episodes of care” associated with a procedure. In the case of a colonoscopy, for example, the episode amount would be based on all of the services patients have received, including the endoscopist, anesthesiologist, pathologist, and the costs of addressing complications. However, these reports are based on averages of what was paid in the past for other patients, and they are often based on services delivered two or more years in the past. These episode costs may or may not have any relationship to what a payer can expect to pay now and what they would pay for a specific patient.

B. Is There Anything Good About Fee for Service?

The four problems just described are unique to healthcare payment; they don’t exist in other industries. All four problems contribute to higher-than-necessary healthcare spending and lower-than-desirable quality and outcomes. However, the fee-for-service payment system would not have persisted for so long without any redeeming features. In fact, fee-for-service payment also has four important strengths:

- A provider is only paid if a patient receives a service
- Payments are higher for patients who need more services
- A provider’s payment does not depend on things the provider cannot control
- A provider knows how much they will be paid before delivering a service

Strength #1: A provider is only paid if a patient receives a service

Similar to payments for most products and services in other industries, a fee for service payment is not made to a provider unless the provider delivers some type of service to the patient. Although there are clearly serious problems with the quality and cost of the services delivered under fee-for-service, the system at least gives patients and payers the confidence that they only pay something if they receive something in return, and that if they pay more, they receive either more services or a service that requires more resources.

Strength #2: Payments are higher for patients who need more services

In other industries, if customers need or want more products or services, they can pay for and receive them. Similarly, under the fee-for-service system, if a patient needs more services, providers can deliver those services and be paid for them. Although it is true that fee-for-service rewards “volume over value,” any payment system that doesn’t adequately support a higher volume of services *when more services are needed* can result in worse outcomes and lower value for patients.

Because of this, fee-for-service is a naturally “risk-adjusted” payment system – payments will be higher for patients with higher needs – although as noted earlier, this “risk adjustment” system is flawed, because it also pays more for delivering more services to patients who don’t have higher needs.

Moreover, there are higher payments for more complex services under fee-for-service. Although the common criticism of fee-for-service payment is that it is not “value-based,” the Medicare Physician Fee Schedule is explicitly based on the “relative value” of different services, as measured in “Relative Value Units (RVUs).” Higher fees are paid for services that have been determined to involve more time, costs, and stress for physicians. Similarly, the Medicare Inpatient Prospective Payment System pays a higher fee (DRG) for inpatient care that, on average, involves more hospital resources than other types of inpatient stays.

Strength #3: A provider’s payment does not depend on things the provider cannot control

In industries other than healthcare, businesses provide warranties and performance guarantees on their products and services, but those warranties are typically limited to correcting defects the producer caused or could have prevented; the businesses generally don’t put themselves at risk for damages caused by the customer or problems with other products or services the customer uses. The businesses will guarantee that a product performs the way it is supposed to, but not that the product will solve every problem for which a customer might try to use it. If a business produces a component part of a larger product, it will guarantee the performance of the part it produced, but not the overall performance of the product in which the part is used. This system has encouraged innovation by businesses in the creation of products and component parts, as evidenced by the fact that most manufacturers of complex products do not make all of the component parts themselves.

In healthcare, many patients have serious injuries, complex combinations of conditions, rare diseases, and other problems that no one knows for sure how to treat or how to consistently achieve a good outcome. The fee-for-service system gives providers resources to try and resolve a patient’s health problems without penalizing the provider when failures occur. This helps high-risk and complex patients to receive treatment that has the

potential for a successful outcome even if the outcome is not guaranteed.

Under fee-for-service payment, the service associated with the fee is defined as something that is delivered to an individual patient by a single physician, hospital, or other provider (including any staff who work for that provider). If two different physicians are involved in a procedure, the contributions of each physician are defined as separate services and are paid separately, and neither’s payment depends on what the other does or does not do. Although some mechanism is then needed for coordinating the services and ensuring they complement each other, this structure allows the individual providers to innovate on the specific components of service that they deliver, and it gives the coordinator access to higher-quality “parts” than they might otherwise be able to obtain.

Strength #4: A provider knows how much they will be paid before delivering a service

Under fee-for-service payment, a provider knows exactly what they will be paid for delivering a service before they deliver that service. Medicare establishes its payment rates by regulation before the beginning of each year, and the rates paid by private health plans are defined in their contracts with providers. This enables the provider to confidently develop a business plan demonstrating they can generate sufficient revenue to cover their costs before they incur those costs.²¹

The Importance of Preserving the Strengths of Fee-for-Service

These four strengths are often taken for granted because they are the aspects of healthcare payment that are most similar to how businesses in other industries are paid. Payment reforms that have failed to preserve these strengths have generally been met with resistance from providers, patients, and purchasers, because they are reluctant to lose the benefits these strengths provide. Implementation of payment reforms that do not preserve these strengths can create problems that did not exist under fee-for-service.

For example, a commonly proposed alternative to fee-for-service is capitation. Under a traditional “global” capitation payment system, a healthcare provider (e.g., a primary care physician or a group of physicians) receives a fixed monthly payment for each patient who is assigned to the provider, and the provider is expected to pay for all of the healthcare services the patient receives during the month using that payment. This is not only very different from fee-for-service payment, it fails to preserve the strengths of fee-for-service:

- The capitated provider is paid regardless of whether they deliver any services to the patient at all or whether they deliver all of the services the patient needs. Although capitation clearly discourages *overuse* of services (because the provider is not paid more for delivering more services), it can encourage *underuse* of services, since the provider is paid even if

they do little or nothing for a patient who needs services.

- The capitated provider is paid the same amount for each patient, even if some patients require significantly more services than others do. The monthly payment may be adequate or more than adequate to cover the costs of caring for the healthier patients, but the payment may not be large enough to cover the costs of caring for very sick patients, particularly if there are not enough healthy patients to balance those costs, and this could encourage providers to avoid the sicker patients altogether. (In some capitation systems, payments are risk-adjusted, but the risk adjustment system may not accurately determine which patients will truly need more services.)
- The capitated provider is responsible for paying for the services that other providers deliver, including treatment of complications those providers cause, even though the capitated provider may have no control over what services those other providers deliver, what they will charge, what complications they will create, etc.

Since these characteristics make capitation even less like the payment systems that function successfully in other industries, it is not surprising that many patients, purchasers, and providers have opposed proposals to move from fee-for-service payment to capitation. (The extent to which capitation and other forms of “population-based payments” correct the weaknesses in fee-for-service payment will be discussed in Section V.)

D. Assessing the Value of Alternatives to Fee-for-Service Payment

Clearly, fee-for-service payment has significant weaknesses that must be corrected in order to improve the quality and affordability of healthcare services. However, fee-for-service payment also has important strengths that patients, providers, and payers will appropriately want to preserve. The fact that an alternative payment model is *different* from fee-for-service payment does not necessarily mean it is *better*.

The four strengths and four weaknesses of fee-for-service payment can serve as eight criteria for evaluating the desirability of proposed reforms to fee-for-service payment. In assessing a value-based payment system, one should ask:

1. Are providers accountable for appropriateness, high quality, and outcomes of services for each patient?
2. Do payment rates match the cost of delivering quality care?
3. Do providers have flexibility to deliver the highest-value services?
4. Are patients and purchasers able to determine the total amount they will pay?
5. Are providers only paid when patients receive help?
6. Are patients with greater needs able to receive more services?
7. Are providers only held accountable for things they can control?
8. Do providers know how much they will be paid before services are delivered?

As shown in Table 1, the fee-for-service system fails on four of these criteria, but it succeeds on the remaining four. Unless an alternative payment system resolves all or most of the weaknesses of fee-for-service payment (i.e., the answers to the questions 1-4 are “yes”) while preserving its strengths (i.e., the answers to the questions 5-8 are also “yes”), the new payment system may not create enough “value” to justify implementing it.

TABLE 1

Desirable Characteristics of a Value-Based Payment System	Fee-for-Service Payment
1. Are providers accountable for appropriateness, high quality, and outcomes of services for each patient?	No
2. Do payment rates match the cost of delivering quality care?	No
3. Do providers have the flexibility to deliver the highest-value services?	No
4. Are patients and purchasers able to determine the total amount they will pay?	No
5. Are providers only paid when patients receive help?	Yes
6. Are patients with greater needs able to receive more services?	Yes
7. Are providers only held accountable for things they can control?	Yes
8. Do providers know how much they will be paid before services are delivered?	Yes

III.

WHY PAY FOR PERFORMANCE PROGRAMS DON'T WORK

The approach that has most commonly been used to create a more value-based payment system is “pay-for-performance” (P4P). Although the details vary widely, most P4P systems have two basic characteristics:

- The healthcare provider is still paid using the same fee-for-service structure that existed before the P4P system, i.e., the provider is paid when a service is delivered, is not paid when a service is not delivered, is paid more for delivering more services, is paid less for delivering fewer services, and is not paid at all for a service unless a specific fee is assigned to that service.
- The amount of payment that the provider receives for delivering an individual service is modified in some way based on one or more measures of the provider’s performance on the quality of care for the patients receiving the services, the total number or total cost of the services the patient receives, or both.²²

The earliest versions of P4P systems exclusively used measures of the quality of care to adjust payments to providers. Most current P4P systems still base adjustments to payments primarily on performance on quality measures, but there has been a growing trend toward also using measures of utilization or spending. For example, the Medicare “Merit Based Incentive Payment System” (MIPS) will ultimately modify payments for most physician services based on measures of quality, spending, clinical improvement activities, and use of health information technology.

This section will discuss the strengths and weaknesses of P4P systems that are based primarily on quality measures, and Section IV will discuss payment systems that adjust payment based on measures of utilization and spending.

A. Why P4P Doesn’t Solve the Problems With Fee-for-Service

1. P4P does not ensure that the services a patient receives are appropriate, high quality, and achieve the desired results for that patient

In a typical pay-for-performance system, the physician, hospital, or other healthcare provider is paid slightly more or less for a service based on the provider’s “score” on one or more quality measures. The measures are generally defined in terms of the percentage of times that a pre-defined standard of quality was met or an outcome was achieved for *group* of patients, not for each *individual* patient. For example, a primary care

physician’s payment or bonus may be based on the percentage of their diabetic patients for whom a hemoglobin A1c test was ordered, or the percentage of their diabetic patients whose hemoglobin A1c level was inside or outside a target range.

Moreover, the measures are defined in terms of the results that the provider achieved for patients in the *past* (i.e., the patients who were treated during whatever past performance period is used for measurement). In many cases, the measures reflect the provider’s performance two years or more in the past, which may bear little relationship to how the provider is currently performing, much less how it will perform in the future.²³

Under P4P, the provider is still paid when a service is delivered to an individual patient even if that service failed to meet the standard of quality underlying the performance measures for that patient. Under P4P, if there is an error or problem in care delivery for an individual patient, the patient and payer still have to pay both for the initial services and for the services that are needed to correct the results of the errors or problems. If the provider performs poorly for many patients, the total *amount* of revenue the provider receives may be slightly lower than under standard fee-for-service payment, but the individual patients who receive poor-quality care from that provider would have to pay exactly the same amount as the patients who received better-quality care. The use of historical group averages means current P4P systems fall far short of providing an individual patient (or the patient’s insurance plan) with a warranty against poor-quality care or a money-back guarantee for failure to achieve the desired outcomes.²⁴

Current P4P systems don’t even come close to assuring patients they will receive what the performance measures imply they should receive. On many common performance measures, 30%-50% or more of patients do not receive the care or achieve the outcomes that the measure defines as desirable.²⁵ The fact that 60% of patients received the care they were supposed to receive is likely of little comfort to the 40% of patients who didn’t.

However, because of the way the measures are typically defined, the 40% of patients who didn’t receive what is being measured don’t know if they were better or worse off as a result. For example, one of the most commonly used quality measures for primary care physicians is the percentage of diabetic patients whose HbA1c (blood sugar) level is below a specific level. While an HbA1c level that is too high can be bad for a patient, an HbA1c level that is too low (indicating hypoglycemia) can be even worse. Yet the standard HbA1c quality measure does not attempt to assess

whether a physician's patients have HbA1c levels that are too low or whether they are experiencing adverse events as a result. There is no method by which physicians can exclude patients from the measure if HbA1c control would be problematic in the context of the patient's other diseases or treatments. One physician's score could be worse than another physician's score if the first has more patients who aren't appropriate for the standard defined in the measure or if the second is treating patients more aggressively than is desirable. Yet under typical P4P systems, the physician with the "worse" score would receive a lower payment.

Ignoring Performance on "Topped Out" Measures

In addition, quality measurement experts routinely advocate for modifying P4P programs by dropping "topped-out" measures, and replacing them with new measures where there is much lower performance. (A "topped out measure" is a measure on which providers are meeting the performance standard for virtually 100% of their patients.) If it was important for patients to receive the care that was defined by a topped-out measure in the past, then it is presumably still important that they do so in the future. Dropping the measure means the patient no longer knows whether their provider is meeting that standard. Moreover, dropping the measure ignores the fact that healthcare providers may have incurred costs to implement activities necessary to achieve the high performance on the topped-out measure. These costs do not disappear unless the providers stop doing whatever they did to achieve the high performance. Dropping one measure and adding a new one, with no effort to determine the cost of achieving high performance on both measures, creates a perverse incentive for the provider to stop the activities that improved the original measures and shift them to activities designed to improve whatever measures are now being rewarded or penalized.

The Difficulty of Reliably Measuring Performance

In many cases, it is difficult to reliably compare the performance of an individual physician or other provider on specific outcomes or particular aspects of quality because only a small number of patients have the condition or receive the procedure to which the measure applies and the variations in needs among patients are greater than the variation in performance among the providers. Payers and measurement theorists have tried to invent workarounds for this problem, such as creating "virtual groups" in which a measure is calculated for all of the patients treated by multiple providers who treat similar types of patients. However, these approaches result in a measure that is meaningless from the perspective of the patient, since individual patients will not receive care from the virtual group, they will receive care from an individual provider, and the care delivered by the patient's provider may be better or worse than what is measured for the group as a whole. Moreover, increasing or decreasing payments for an individual provider based on the performance of a "virtual group" makes it less likely that improvements one provider makes in care will translate into higher payments or that a poor quality provider will receive a penalty.

2. P4P does not ensure that payments are sufficient to cover the cost of delivering quality care

P4P systems either (1) increase or decrease fee-for-service payment amounts for individual services by a pre-defined percentage, or (2) provide a lump-sum bonus or impose a lump-sum penalty at the end of a period of time. Lump-sum amounts are generally calculated as a percentage of the fee-for-service payments made during the defined period of time, so as a practical matter, the two approaches have a similar impact on the revenue the provider receives.

The percentage by which payments are adjusted is generally less than 10%, and most commonly in the 2-4% range.²⁶ This increase or decrease in payment is typically described as an "incentive" for the provider to achieve good performance, and there is no explicit effort to determine whether the size of a P4P bonus payment matches any increase in costs the provider incurs to achieve higher scores on the performance measures. If standard fee-for-service payments are less than the cost of high-quality care, the P4P system would solve this problem only if the potential P4P bonus is greater than or equal to the shortfall. Conversely, if the standard fee-for-service payments for services are sufficient to deliver high-quality care and good outcomes, then a P4P bonus could result in payments higher than necessary. Moreover, because the P4P payment to a provider is explicitly calculated as a percentage of the provider's fee-for-service payments, it does not solve the problems caused by paying the same fee for a service regardless of the number of times the service is delivered and it may actually exacerbate those problems.

Congress and state legislatures do not pass legislation without first creating a "fiscal note" defining the expected cost of the legislation and then including a mechanism sufficient to cover that cost (e.g., higher taxes or cuts in other programs) either as part of the legislation itself or as part of the overall federal or state budget. In contrast, however, Medicare and health plans have routinely defined quality and utilization measures for providers without determining what it will cost a provider to collect information relevant to the measure, to document the reasons why some patients are not appropriate for the measure, and to hire staff, purchase equipment, etc. needed to achieve high performance on the measures, and without assuring that either the current payment rates or the pay-for-performance bonuses would be adequate to cover those costs.

Moreover, payers routinely change the quality measures in pay-for-performance programs each year without changing the pay-for-performance bonuses or the payments for individual services. This implicitly assumes that the cost of measuring and improving performance on each quality measure is identical to the cost associate with every other quality measure, and that the cost of achieving high performance on two measures is the same as achieving high performance on one. The cost to providers of a P4P system is not just the services needed to improve quality or outcomes, but the costs of collecting and analyzing the information needed for the

performance measures. There is growing recognition of how substantial the administrative costs have become to collect quality measure information.²⁷

If smaller providers are unable to afford the costs of measuring and improving performance even with the P4P bonus, the payments made for their services could be reduced, and the providers might be forced out of business. The practices would be penalized, not because of unwillingness to deliver better care, but because they cannot afford to do so, and the financial penalties in the P4P system could reduce patient access rather than result in improvements in the quality of care.

3. P4P does not give providers the ability to deliver high-value services that are not supported under fee-for-service

A P4P system does not change the underlying structure of the fee-for-service system, so it does not directly pay for any services for which fees are not otherwise paid. Although the provider might be able to cover the costs of a new service that wasn't directly eligible for a fee using

the higher payments made under P4P, the provider would not have the flexibility to actually substitute the new service for an existing service. Because the P4P payments are tied directly to the provision of the current services, delivering fewer fee-based services would also reduce the P4P payments.

4. P4P does not enable patients or payers to determine the total amount that will be charged or paid for all services to treat a particular condition, or to compare costs across providers

A P4P system does nothing to help patients or payers understand the total "package price" for their care. In fact, as described in more detail below, the total cost of care may be even more difficult to predict under a P4P system.

EXAMPLE 2: HOW P4P FAILS TO SUPPORT THE COSTS OF BETTER CARE

Assume a physician practice is currently receiving an average of \$500 per patient per year in fee-for-service payments for office visits with patients who have a health problem such as diabetes. Assume that the practice could achieve better outcomes for the patients by hiring a nurse to provide education and other services to the patients, that it would cost \$75,000 per year to employ such a nurse, and that the nurse could provide these services to up to 1,000 patients during the course of a year.

If the practice had 1,000 eligible patients, its current annual fee-for-service revenue from office visits with those patients would be \$500,000. A 5% P4P bonus based on better outcomes would fall far short of the cost of the nurse (\$500,000 x 5% = \$25,000), so a 15% bonus would be needed to cover the cost.

However, a smaller practice with only 500 eligible patients would only have \$250,000 in fee-for-service revenue and even a 15% P4P bonus would not be enough to enable the practice to afford to hire a nurse (\$250,000 x 15% = \$37,500, which is only half of the \$75,000 cost to employ a nurse).

A 15% P4P bonus would give the physician practice enough revenue to hire a nurse if the practice had 1,000 patients and nothing else changed, but if the better care provided by the nurse resulted in the patients coming to the office 20% less frequently, the practice would see its fees for office visits reduced by \$100,000 (1,000 patients x \$500 per patient x 20%).

Moreover, if office visits were reduced by 20%, the absolute amount of the P4P bonus would also be reduced by 20% (since the P4P payments are tied to fees), so the bonus revenues (1,000 patients x \$500 per patient x 80% x 15% = \$60,000) would no longer be adequate to pay for the nurse. This means that paradoxically, the practice would be better off just accepting a 15% penalty for doing nothing (reducing its revenues by \$75,000 but not changing its costs) than by hiring the nurse and improving performance on the P4P quality measure (which would result in a net loss of \$115,000).

	Current	Nurse + 5% P4P	Nurse + 15% P4P	Fewer Visits	15% P4P Penalty
# of Patients	1,000	1,000	1,000	1,000	1,000
Fees/Pt/Year	\$500	\$500	\$500	\$400	\$500
Visit Revenues	\$500,000	\$500,000	\$500,000	\$400,000	\$500,000
% P4P		5%	15%	15%	-15%
P4P \$		\$25,000	\$75,000	\$60,000	(\$75,000)
Total Revenues	\$500,000	\$525,000	\$575,000	\$460,000	\$425,000
Current Costs	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
Cost of Nurse		\$75,000	\$75,000	\$75,000	\$0
Total Costs	\$500,000	\$575,000	\$575,000	\$575,000	\$575,000
Net Margin	\$0	(\$50,000)	\$0	(\$115,000)	(\$75,000)

B. Why P4P Doesn't Preserve All of the Strengths of Fee-for-Service

Clearly, typical P4P systems do not solve the biggest problems with fee-for-service payment and they may make some of them worse. However, P4P can create additional problems by weakening some of the strengths of the fee-for-service system.

5. Providers continue to be paid only if they help patients with their problems

Because P4P is just an adjustment to the amounts paid for individual services, a provider still has to deliver a service in order to be paid, so on this criterion, P4P has the same strength as traditional fee-for-service.

6. Providers could be paid less for serving patients with greater needs, thereby making it more difficult for high-need patients to obtain care

Under a P4P system, providers are still paid separate fees for each individual service, so at any given point in time, a provider will be paid more for delivering more services to a patient who needs more services. However, serving the higher need patients could reduce the provider's scores on the performance measures in the P4P system if the provider finds it is more difficult to achieve good outcomes for the higher need patients. Since P4P adjustments apply to all of the provider's services, not just the services delivered to the higher-need patients, the provider's overall revenue could be reduced compared to what would have been received if the provider had not served the higher need patients.

The P4P system is supposed to create an incentive for providers to improve the quality of care they deliver. However, if the same quality measure is applied to all patients, and if it is significantly harder or more expensive to deliver higher quality care to high-need/high-risk patients, then the provider could improve performance on the measure by not treating the high-need/high-risk patients. For example, if the amount that surgeons are paid to perform surgery is adjusted based on the mortality rate of the patients on whom they operate, and if high-risk patients have a higher mortality rate, the payment system creates an incentive for the surgeons to avoid operating on the high-risk patients. Depending on the size of the P4P adjustment, the loss of revenue from not performing surgery on the high-risk patients, might be less than the reduction in revenue caused by the P4P penalties from performing the surgeries.²³

In theory, this problem can be avoided by risk-adjusting quality measures, e.g., by comparing the mortality rates for high-risk and low-risk patients to "expected" levels of mortality and then creating a weighted average. However, most quality measures are not currently risk adjusted, and it is unlikely that any risk adjustment formula could adequately capture all of the many factors that can affect outcomes for patients with complex conditions.

A similar problem arises with respect to patients who have the kinds of conditions for which quality measures have been developed versus patients for whom there are no measures. Most current quality measures focus on a relatively small number of health conditions, so the quality score for a primary care provider or hospital that treats many different kinds of conditions is based on their performance on only a subset of their patients. Although this presumably encourages the provider to pay greater attention to quality for the patients who have conditions where quality measures exist, it also implicitly penalizes them for trying to treat such patients, and particularly for trying to treat the higher-need/higher-risk subset of those patients. For example, the Medicare Hospital Readmission Reduction Program reduces a hospital's payments for every patient it admits based on the readmission rates for a subset of patients with specific conditions.²⁹ This means, for example, that a hospital receives less payment for treating a stroke patient if it has a high readmission rate for patients with COPD, and it receives less payment for performing cancer surgery if it has an above-average readmission rate for hip replacement surgery, even though completely different physicians will be involved in the different kinds of care. Although this is intended to create a strong incentive for the hospital to reduce readmission rates, it also creates a strong incentive for the hospital to avoid admitting patients who have the targeted condition and have other characteristics that make them a high risk for readmission, such as lack of access to good primary care.

Consequently, a P4P system designed to improve the quality of care can make it more difficult for high-need patients to receive any care at all.

7. A provider's payment does not depend solely on things that the provider can control

Because a P4P system is based primarily on fee-for-service, the primary factor affecting a provider's payment for an individual patient will still be the services the provider delivered to that patient. However, the provider's performance on the measures used in the P4P system may be affected by factors that are outside the control of the provider. One can define four categories of reasons why a physician or other healthcare provider does not achieve high performance on quality measures:

- a. The physician or other provider did not deliver, but could have delivered, a service to the patient that was required by the measure or that was necessary to achieve the desired outcome (e.g., the physician did not prescribe the appropriate medications needed to control the patient's blood sugar);
- b. The available services and treatments are not always successful in achieving the desired outcome for patients who do receive them (e.g., the most effective medications available do not have 100% success in controlling blood sugar for all patients), or the patient has characteristics that are known to reduce the likelihood of a good outcome but those characteristics cannot be changed by the physician

or other provider whose performance is being measured;

- c. The patient does not have the ability or willingness to accept the treatment or services that could improve outcomes (e.g., the patient does not have prescription drug insurance and cannot afford the medications needed to control their blood sugar); or
- d. None of the available treatments are appropriate for the patient (e.g., the patient has characteristics that contraindicate treatment).

Only the first of these four categories is clearly within the control of the provider. However, in most P4P systems, there is no method for focusing measures on this category. For example, physicians and hospitals are generally not permitted to exclude patients from the denominator of a measure even if the patient has characteristics that contraindicate the recommended treatment, if the patient cannot afford the treatment, or if the patient simply refuses the treatment. As with the discussion above regarding quality measures, the P4P structure can discourage providers from treating patients who are more likely to have problems adhering to treatment regimens or for whom existing treatments have high rates of failure.

8. The payment amounts are not known before services are delivered

In many P4P systems, the healthcare provider can't determine how they scored on the performance measures until after the end of the performance period. There are two reasons for this:

- Many performance measures cannot be calculated directly by the provider based on information available to them. For example, a measure of the rate at which the patient is hospitalized or a measure of the total spending on the patient's care must be calculated using claims data that is only available to the patient's insurance plan, not the provider.
- In many P4P systems, the performance level that must be reached to achieve a bonus or avoid a penalty is based on the average, median, or another measure of all providers' performance during the same performance period, and that target cannot be known until after the period ends.

In addition, many P4P systems require that the bonuses and penalties be "budget neutral." This means that one provider cannot receive a bonus unless another provider receives a penalty. In these systems, even if the provider knows the performance standard for a measure in advance and even if they can determine that their own performance was above the standard, the amount of payment they will receive, if any, will not be known until the performance of all other providers is determined. If all other providers exceeded the standard by similar amounts, none of their payments would change. This "tournament" approach discourages collaboration among providers because providers will only receive bonuses if other providers receive penalties.

C. Is There a Role for P4P?

As shown in Table 2, pay-for-performance fails to solve any of the problems with fee-for-service payment and it fails to retain two of the key strengths of fee-for-service payment.

In light of this analysis, it should not be surprising that evaluations have found little or no impact from P4P systems. The problem with P4P systems is not that the "incentives aren't big enough," but that P4P systems don't actually solve the problems with the fee-for-service system, and they also introduce undesirable new incentives for providers that could harm patients. Increasing or reducing the number of performance measures won't make much difference, either, if the barriers to improving performance aren't addressed. No matter how thick one makes the extra layer of P4P on top of fee-for-service payment, it doesn't correct the fundamental problems with fee-for-service and it may make them worse.

No Other Industry Uses a Similar Payment System

No other industry uses the healthcare pay-for-performance model as a way of paying for products or services. In fact, it is difficult to imagine how such a system would work in other industries. For example, if you paid to buy a new car under a system similar to healthcare pay-for-performance, you would have to commit to pay whatever the manufacturer charged you, without knowing in advance how much that might be. Your car would be custom-made for you, you'd pay a separate amount for each part the manufacturer had decided to use in the specific car, and you'd pay the auto assembly workers based on how many hours it took them to assemble those parts. There would be no warranty against defects; instead, you would have to pay the auto manufacturer a small percentage more on top of the prices of the parts and labor if the type of car the manufacturer was selling two years ago had a lower repair rate than all of the similar car models being sold by other manufacturers at that time. However, the car you received this year might have been assembled with higher- or lower-quality materials or parts than the cars the manufacturer sold two years ago, it may have been assembled by more- or less-skilled workers than the cars sold two years ago, and other manufacturers may have made more improvements in their cars over the past two years than the car company you're considering, such that the difference in performance between the models available today bears no relationship to the differences two years ago. Moreover, the specific car you're buying may have a manufacturing defect that no other car of that model has, but without a warranty, you would have to pay the full cost of repairs on top of the higher amount you paid based on the manufacturer's overall repair rate two years ago. That type of payment system makes no sense in buying cars or any other product or service, and it makes no sense in healthcare, either.

Clearly, a healthcare provider's performance on quality and cost should affect whether and how much that provider is paid. But pay-for-performance systems cannot do that effectively.

TABLE 2

Desirable Characteristics of a Value-Based Payment System	Pay-for-Performance (Using Quality Measures)
1. Are providers accountable for appropriateness, high quality, and outcomes of services for each patient?	No
2. Do payment rates match the cost of delivering quality care?	No
3. Do providers have the flexibility to deliver the highest-value services?	No
4. Are patients and purchasers able to determine the total amount they will pay?	No
5. Are providers only paid when patients receive help?	Yes
6. Are patients with greater needs able to receive more services?	Not Always
7. Are providers only held accountable for things they can control?	No
8. Do providers know how much they will be paid before services are delivered?	No

IV. WHY SHARED SAVINGS AND SHARED RISK PROGRAMS DON'T WORK

Spending and utilization measures can also be used to modify fee-for-service payments under a P4P system in the same way that quality measures are used.³⁰ However, an approach that is being more widely used to reward and penalize providers for utilization and spending is “shared savings.” Under most shared savings programs:

- The physician, hospital, or other healthcare provider is paid the same fees for the same services as they would have been paid under the standard fee-for-service system used by the payer.
- The total spending on all services the provider’s patients received (from all providers) during a period of time (e.g., a year) is tabulated. (In some shared savings models, the measure of spending is based only on services related to a particular condition or procedure.) The provider is eligible for a bonus payment if total spending is lower than the amount the payer calculates that it would have spent in the absence of the shared savings program. The maximum bonus payment is proportional to the difference between the projected spending and actual spending, i.e., the provider receives a “share” of the savings calculated by the payer.
- If the provider is eligible for a bonus payment, the amount of the bonus may be adjusted based on the provider’s performance on a set of quality measures, using methods similar to P4P programs.
- In a shared savings payment system, providers can receive a bonus if spending goes down, but they are not penalized if spending goes up. In contrast, in a shared risk or “two-sided risk” payment system, a

provider also can be financially penalized if spending is higher than expected.³¹

Despite the different name, the fundamental structure of shared savings/shared risk payment systems is very similar to the P4P systems described in Section III, because the provider continues to be paid separate fees for each individual service they deliver and they receive a financial bonus or penalty based on a measure of their performance. Moreover, providers have “risk” under both P4P systems and shared risk payment systems because under both systems, a provider can lose a portion of their income if their performance does not meet expected levels.

However, a key difference between P4P systems and shared savings/shared risk systems is the *magnitude* of the change in the provider’s payment. In P4P systems, the bonus or penalty is based on a predefined *percentage of that provider’s fee-for-service payments*. In contrast, under shared savings and shared risk payment models, the bonus or penalty is *proportional to changes in total spending on the patient*. In most cases, the total spending on *all* services a patient receives is many times larger than what any individual provider is paid, so even a small percentage share of savings or cost increases could represent a high percentage of the provider’s revenues, as shown in the example above.

The largest and most visible shared savings program in the country is the Medicare Shared Savings Program (MSSP). Although it is called a “shared savings” program, it includes optional “tracks” that involve downside risk, i.e., penalties for increases in spending as well as bonuses for achieving savings. Many other

EXAMPLE 3: HOW A SHARED SAVINGS/RISK PAYMENT SYSTEM WORKS

Assume that a physician practice has been receiving an average of \$500 per patient in fees for office visits by patients with a particular chronic disease during the course of the year, and the patients with that chronic disease are currently receiving an average of \$10,000 in services related to their disease from all providers, including laboratory tests, drugs, procedures delivered by other physicians, visits to the emergency department (ED), etc. as well as the office visits to the physician practice. The physician practice then becomes part of a shared savings payment model. The physician practice identifies ways to order fewer tests and to reduce the number of times the patient needs or wants to visit the ED, and this reduces the average total annual spending on the patients from \$10,000 to \$9,600, i.e., by \$400. Under the shared savings payment system, the physician practice would continue to receive fees for office visits averaging \$500 per patient (if the frequency of office visits remains the same), but it would also receive a bonus payment equal to 50% of the \$400 per-patient savings, i.e., \$200 for each patient. This would represent a 40% increase in the physician practice’s total payments.

If, despite efforts to reduce spending, average spending increased from \$10,000 to \$10,400, there would be no penalty under the shared savings program. But if the physician practice was in a shared risk program instead, they would also be held financially responsible when spending increases. If the physician practice was responsible for 50% of spending increases, the practice would be required to make a \$200 payment to the payer for each of their patients (50% x (\$10,400 - \$10,000)). This would reduce the practice’s total payments for the patients by 40% (\$500 per patient paid to them for office visit fees minus the repayment of 50% of the \$400 increase in total per-patient spending leaves them with net revenue of \$300 per patient.)

payment models also use a shared savings/shared risk methodology even though they are not described as shared savings programs. For example, in the CMS Oncology Care Model (OCM) payment program, oncology practices receive a “performance based payment” that is equal to any savings greater than 4% of the total spending for patients who are receiving chemotherapy.³²

A. Why Shared Savings/Shared Risk Programs Don’t Solve the Problems With Fee-for-Service

1. Shared Savings/Shared Risk payment systems do not ensure that services delivered are appropriate, high-quality, and achieve the promised results, and they can actually reward lower-quality care

Shared savings payment systems are no different than P4P systems in that the provider is still paid for each service delivered to a patient regardless of whether the service was appropriate for the patient’s needs, whether it met the relevant standard of quality, and whether it achieved the desired outcome. In a shared savings payment system, if there is an error or problem in care delivery, the patient and payer still have to pay for both the initial services and the services to correct the results of the errors or problems, just as they do under fee for service and P4P.

As explained in Section III, a P4P system is supposed to “incentivize” higher quality for a *group* of patients rather than to guarantee high quality for any *individual patient*. It does this by reducing payments to providers who performed poorly on average for a group of patients and increasing payments to providers who performed well on average. Shared savings payment programs also measure quality for groups of patients similar to P4P systems, but in most shared savings payment programs, performance on quality measures has no effect on providers’ payments unless savings have been generated for the payer, because the quality measures only affect the amount of the shared savings payment, not the payments for the individual services. This means that as long as total spending on their patients is similar, two providers can be paid the same amount to treat a patient even if one delivers lower-quality care than the other, similar to what happens under the standard fee-for-service system.

Even if lower-quality care results in higher spending during the time period covered by the payment model, there is still no reduction in the provider’s payments for individual services under a shared savings model. The only “penalty” for poor quality care would be a smaller bonus than the provider might otherwise have expected *if* the provider had also successfully reduced spending. For example, if Provider A delivers lower-quality care than Provider B and the lower quality care results in Provider A’s patients being hospitalized more often, average spending on Provider A’s patients would be higher, and Provider A would be less likely to receive a shared

savings bonus than Provider B. Only in a shared risk payment model could there be an actual reduction in the provider’s payments compared to fee for service, and even then, lower quality alone would not cause a reduction in the provider’s payments. Under a shared risk model, there would only be a reduction in the provider’s payments due to poor quality if there was also an increase in spending.

How Shared Savings Can Reward Lower-Quality Care

Lower quality care sometimes results in higher healthcare spending, but often it does not. Many aspects of quality and many desired outcomes do not translate directly into changes in the measure of healthcare spending used in a shared savings or shared risk model. For example, a patient whose mobility is limited by poor outcomes may be unable to work or participate in other activities, but there may be no difference in the amount of healthcare services they use. In other cases, poor quality care today will result in higher healthcare spending several years in the future, but the higher future spending will occur after the performance period measured in the shared savings/shared risk model and therefore it will not affect the savings or cost calculation that determines the provider’s current bonus or penalty.

In these situations, a provider can actually be paid *more* for delivering lower quality care than higher quality care in a shared savings payment model. The shared savings payment system explicitly provides a bonus if total spending on the patient during the current year is less than would have been expected, even if the lower spending was achieved by failing to provide a service the patient needed or which could have benefited them. Although shared savings systems reduce bonus payments for low performance on quality measures, there are not measures corresponding to all of the negative impacts that a patient could experience when specific services are withheld.³³

For example, assume a physician treating a patient’s disease has a choice between two drugs, one of which has a much higher cost but is also less likely to cause undesirable side effects for the patient. Under a shared savings program, the physician could potentially receive a large bonus for using the lower-cost drug (e.g., 50% of the difference in price between the two drugs), while the patient would experience higher levels of pain and other side effects. Unless there is a quality measure explicitly designed to measure the severity of the side effects the patients experience, or unless additional treatment is required to address side effects (thereby increasing spending), the provider would receive a bonus based on the fact that they had generated savings by using the lower-cost drug without regard to the adverse impacts on the patient.³⁴

Even if the shared savings payment model includes a quality measure assessing the types of impact that would occur when a patient is denied an expensive treatment, poor performance on the quality measure may not eliminate the bonus that would result from the savings because the formulas for calculating bonuses are calculated for a *group* of patients, not for *individual*

patients, and the negative impact on the quality score may not fully offset the increase in savings. For example, even if denying an expensive drug to patients results in a worse score on a measure of pain control or mobility, the reduction in the bonus due to worsening of the measure of pain or immobility may be less than the increase in the bonus that results from the savings achieved by not using the drug. This would be particularly true for patients with less common conditions that require expensive treatments, since failure to treat them could result in significant savings, but a quality measure assessed on the overall patient population might not be affected much by a change for a small number of patients.

There is no way to assess the extent to which a shared savings payment model encourages stinting on care unless detailed information is available on *how* savings has been achieved. In its reports on the Medicare Shared Savings Program, CMS has described how much money Accountable Care Organizations saved and how they performed on quality measures that are explicitly used in the program, but it does not provide information that would enable a patient or other interested party to determine exactly how each ACO achieved savings.

2. Shared Savings/Shared Risk payment models are unlikely to fully align payments with the cost of delivering quality care

Shared savings and shared risk payment systems make no explicit effort to ensure that the payments a provider receives are adequate to cover the cost of high quality, appropriate care. Since providers are initially paid the same fees for the same services under shared savings/shared risk models as they receive under fee-for-service, services that are underpaid or overpaid under fee-for-service will continue to be underpaid or overpaid under the shared savings/shared risk model, at least initially. Although shared savings bonuses and shared risk penalties can change providers' total revenues from what they would have been under fee-for-service, the bonuses and penalties are not explicitly designed to align providers' revenues more closely to the cost the providers incur in delivering services. "Savings" are defined in terms of changes in the amounts the *payer pays* (i.e., the cost to the payer), not the changes in the *provider's costs*, so if a shared savings payment matches the change in the provider's cost, it is only by accident.

Example 4 shows an example of a hospital that would be financially harmed by reducing readmissions where the typical 50% shared savings formula would mitigate but not eliminate the mismatch between costs and payment. In the example, giving the provider a higher share of the savings could solve the problem, but providers do not typically have the ability to negotiate customized shared savings/shared risk amounts. Moreover, the "right" shared savings percentage is heavily dependent on the hospital's cost structure, the baseline volume of services, and the change in the number of services delivered. If a higher proportion of the hospital's costs were fixed than shown in the example, an even higher shared savings percentage would have been needed to

cover the higher average cost that would result from reducing readmissions, and a higher shared risk percentage would be needed to eliminate the additional profits the hospital would receive from a higher readmission rate.³⁵ If the hospital had a larger or smaller change in the readmission rate, a different shared savings percentage would be needed to ensure payments matched costs.

In addition, under typical shared savings programs, the healthcare provider that is eligible for the shared savings bonus payment is not necessarily the provider that is gaining or losing revenue for delivering more or fewer services. Since any one provider's services represent only a portion of the total spending measured in the shared savings/shared risk payment model, it is quite possible that one provider could make higher profits by creating losses for other providers. In the example above, assume that a group of primary care physicians is participating in the shared savings model instead of the hospital, and by delivering the new service that costs \$200 per patient, they are able to successfully eliminate readmissions at the hospital. The physicians would then be eligible for a \$450,000 shared savings payment (50% of the \$900,000 reduction in the payer's spending on hospital admissions), which would more than offset the \$180,000 cost the physicians incurred to deliver the new service, but the hospital would receive nothing to cover its \$410,000 loss from having fewer admissions. As a result, the hospital might be unwilling to cooperate with the physicians' efforts to reduce readmissions, or the hospital might seek to acquire the physician practice in order to either capture the savings or to prevent the physicians from pursuing the initiative. Alternatively, the hospital might accept the fact that it was going to lose money from the readmission reduction effort and look for ways to increase utilization of other services to replace the lost revenues.

If all of the providers involved in the patient's care are part of the same organization (e.g., an Accountable Care Organization) and that organization receives the shared savings payment, it would no longer be possible for one provider in the organization (e.g., a physician practice) to directly benefit by reducing the services delivered by another provider in the organization. However, this also means that the individual providers would have less certainty about whether they would receive an appropriate share of the savings resulting from delivering fewer of their own services.³⁶ If an ACO uses a standardized formula for distributing savings among the providers in the ACO, and if some providers reduce unnecessary services and others do not, the latter would do better financially than the former. This is because the providers that continue delivering unnecessary services would receive fee-for-service revenues from those services as well as a share of the savings generated by the providers that reduce the number of services they deliver. The result is that individual providers in the ACO would still be in the same basic fee-for-service system as always. (The ACO could direct the savings to those providers who were responsible for achieving it, but in order to do so, the ACO would, in effect, need to create new payment models for those providers.)

EXAMPLE 4: SHARED SAVINGS/RISK AMOUNTS MAY NOT MATCH CHANGES IN PROVIDER COSTS

Assume that a hospital performs a certain type of inpatient procedure for which it is paid \$10,000 per patient, and assume that because of poor post-discharge care, 10% of the patients have to be readmitted to the hospital for a repeat of the procedure. Assume further that it costs the hospital \$5,000,000 each year to offer the procedure regardless of how many patients it treats (e.g., the costs of the facility, equipment, and core personnel) and that it costs the hospital an additional \$4,900 for each patient who actually receives the procedure (e.g., the cost of the drugs and medical devices purchased specifically for that patient). Assume also that the hospital is performing the procedure on 900 patients per year and so it generates a small margin on the procedure. (The hospital receives \$10,000 for each of the 900 patients and another \$10,000 for each of the 90 readmissions, for a total of \$9,900,000 in revenue; its costs are the \$5,000,000 in fixed cost plus the \$4,900 variable costs for each of the 990 patients, or a total cost of \$9,851,000, leaving a margin of \$49,000.)

If the hospital were able to eliminate the readmissions by delivering a new post-discharge service that costs \$200 per patient, its total costs would decrease to \$9,590,000 (\$5,000,000 + \$4,900x900 + \$200x900) but its revenues would decrease to \$9,000,000 (\$10,000 x 900), creating a \$590,000 loss. Under a 50% shared savings payment model, the payer would give the hospital a \$450,000 bonus (50% of the \$900,000 savings achieved by the payer). This would reduce the hospital's loss to \$140,000, but the hospital would still be better off financially by maintaining the status quo. On the other hand, if the payer gave the hospital 70% of its savings, the hospital would be able to cover its costs and the payer would still save \$270,000 (2.7%). The 70% shared savings model increases the hospital's total payment per admission from \$10,000 to \$10,700, which matches the increase in the average cost per patient resulting from both the lower volume of patients and from the addition of new services to prevent readmissions.

	Current	New Service	New Service + 50% Shared Savings	New Service + 70% Shared Savings	Higher Readmission Rate	Higher Readmission Rate + Shared Risk
Number of Patients	900	900	900	900	900	900
Payment Per Patient	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Readmission Rate	10%	0%	0%	0%	20%	20%
Total Payments	\$9,900,000	\$9,900,000	\$9,900,000	\$9,900,000	\$10,800,000	\$10,800,000
Gross Payer Savings		\$900,000	\$900,000	\$900,000	(\$900,000)	(\$900,000)
Shared Savings/Risk %			50%	70%		50%
Net Payer Savings		\$900,000	\$450,000	\$270,000	(\$900,000)	(\$450,000)
Shared Savings to Hospital			\$450,000	\$630,000		(\$450,000)
Total Hospital Revenue	\$9,900,000	\$9,000,000	\$9,450,000	\$9,630,000	\$10,800,000	\$10,350,000
Hospital Fixed Cost	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000
Variable Cost Per Patient	\$4,900	\$5,100	\$5,100	\$5,100	\$4,900	\$4,900
Total Cost	\$9,851,000	\$9,590,000	\$9,590,000	\$9,590,000	\$10,292,000	\$10,292,000
Hospital Margin	\$49,000	(\$590,000)	(\$140,000)	\$40,000	\$508,000	\$58,000

3. Shared Savings/Shared Risk programs may not enable providers to deliver services that are not paid under fee-for-service

Since a shared saving/shared risk payment system does not change the underlying structure of the fee-for-service system, it does not directly pay for any services that the fee-for-service system doesn't pay for. For example, physician practices are not paid more if they hire nurses to provide education to patients about managing a chronic disease the fee-for-service system, and they would not be paid for those services under the shared savings/shared risk system, either. If the provider felt that delivering the unpaid service would result in savings and that the provider's share of the savings would cover the cost of the service, the provider would have to use its own resources to pay for the service, wait for the savings calculation to be performed, and hope that the share of the savings the provider ultimately receives is enough to cover the costs it incurred.

If a provider felt that some patients would benefit more from a non-billable service than from a billable service (e.g., the patient would benefit more from visit with a nurse than a visit with a physician), and if the provider substituted the non-billable service for the billable service, the reduced spending on the billable services would produce savings for the payer and the provider would, in theory, be eligible to receive a portion of those savings back. The shared savings payment would, in effect, function as delayed compensation for the non-billable service, but the provider would need to have sufficient capital to pay for the up-front cost of the non-billable service, to cover the loss of revenue from the billable service it did not deliver, and to wait for reimbursement through the shared savings payment. This will be less feasible for small physician practices than for large medical groups, hospitals, and health systems.

Moreover, many shared savings models only pay bonuses after a "minimum savings rate" has been achieved, so a simple substitution of one service for another might not generate enough savings to reach that threshold. A provider would be more likely to reach the minimum threshold of eligibility for a shared savings payment if the new service also enabled better outcomes that translated into reduced spending on other services. But the shared savings calculation is based on *total* spending, not just one aspect of spending. If there are increases in spending in a different aspect of care that offset the savings the provider generated, the provider would receive no shared savings and would have no new revenues to offset the costs they incurred.³⁷ Consequently, not only would the provider need to invest funds upfront to deliver the unbillable service, it would need to be prepared to lose some or all of those funds if it turned out that no shared savings payment was received. This would create "downside risk" for the provider in what is portrayed as an "upside-only risk" shared savings payment program.

Even if a shared savings payment is received in this way, it will only be adequate if the cost of the new service is less than the payment for the previous service times the percentage of savings paid to the provider. For example, if the provider can receive a maximum of 50% of any savings, then the unbillable service (e.g., the phone call) would have to cost less than 50% of the payment for the billable service it replaces (e.g., the office visit). Depending on the quality formula in the shared savings program, the actual shared savings percentage might be far below the 50% maximum, so as a practical matter, only relatively low cost services could be financed in this way.

Problems Caused by Rebasing

Finally, even if a provider is able to successfully use a shared savings payment to finance the delivery of a service that is not directly billable, it might only be able to do so for a limited period of time. This is because most shared savings models include a provision for "rebasings" the expected spending level periodically, i.e., recalculating what the payer *expects* to spend based on what they are *actually* spending. The practical effect of this can be to eliminate future shared savings payments for savings that were first achieved in the past and then maintained over time.

Since the shared savings calculation is based on the *payer's spending*, not on the *provider's costs*, when the provider delivers a non-billable service instead of a billable service, the payer cannot "see" the non-billable services (because no bills are submitted for them). The payer only sees the *billable* services. Substituting a non-billable service for a billable service makes it appear that care is being delivered with fewer services than in the past, and so the expected spending level is reduced correspondingly. The payer then keeps all of the savings and the provider no longer receives the share of the savings that was used to pay for the service that achieved the savings.

Some shared savings/shared risk payment models address the gaps in the fee for service system more directly by providing new upfront payments to providers for services that are not billable under the fee-for-service system. For example, the Medicare Advance Payment ACO Model provided some Accountable Care Organizations with upfront grants for certain kinds of infrastructure costs, and the Oncology Care Model allows oncology practices to bill for a new monthly payment for patient services. However, the inclusion of these upfront payments is effectively an acknowledgement that a pure shared savings/shared risk payment model does not adequately address the gaps in what is paid for under fee-for-service.

EXAMPLE 5: PROBLEMS CAUSED BY REBASING SPENDING IN SHARED SAVINGS MODELS

An orthopedic surgeon wants to improve care and reduce costs for patients receiving hip replacement surgery. She enters into a shared savings contract with a payer under which she will be able to receive 50% of any reduction in the payer's average spending on the total cost of the hip replacement (including the cost of the surgery and the post-discharge rehabilitation). The surgeon finds that 40% of the patients are currently being sent to skilled nursing facilities (SNF) for rehabilitation after discharge, and the payer is spending \$10,000 on average for each SNF stay. Combined with the surgeon's fee of \$1,200 and the hospital charge of \$12,000, the payer spends an average of \$17,200 per patient ($\$1,200 + \$12,000 + 40\% \times \$10,000$). The payer defines this as the expected spending level and promises to pay the surgeon 50% of the difference if the actual average spending is below this expected level.

The surgeon believes more patients could go home if they could receive intensive home support and rehabilitation during the first week after discharge, but the payer does not currently pay for that specific type of service. The surgeon hires physical therapists and home care aides to provide both rehabilitation and personal care to patients in their homes, and she finds that half of the patients who are currently being sent to skilled nursing facilities could be safely sent home with this type of support. The home support and rehabilitation service costs an average of \$4,500 per patient, less than half of the cost of a SNF stay. Over the course of a year, she performs hip replacement surgery on 100 patients. She is now able to send 20 of the patients home with this service instead of to a skilled nursing facility. This saves a total of \$200,000 for the payer (20 patients x \$10,000). The surgeon receives 50% of this amount, which is sufficient to pay the cost of the home support and rehabilitation services for the 20 patients ($\$4,500 \times 20 = \$90,000 < 50\% \times \$200,000$). At the end of the first year, the payer recalculates its average spending per patient and finds that it is now \$15,200 ($\$1,200$ for the surgeon + $\$12,000$ for the hospital + $20\% \times \$10,000$ for SNF stays) instead of \$17,200. Since the payer is not paying directly for the new home rehabilitation and support services, it doesn't factor the cost of those services into its calculation, and so it redefines the expected spending level as \$15,200. There is still no direct payment for the home rehabilitation and support services, but the surgeon is eligible for 50% of any savings the payer receives below this new expected spending level. In the second year, the surgeon continues to provide the home rehabilitation and support services, and 20 patients continue to be sent home with the new service instead of being sent to SNFs. The payer's average spending per patient is \$15,200, which is exactly equal to the expected spending level, so the surgeon is not eligible for a shared savings payment. The surgeon has spent \$90,000 on the home rehabilitation and support services program, but receives no revenue from the payer to cover that cost. The \$90,000 cost represents 75% of the total \$120,000 in payments the surgeon received for all 100 surgeries she performed, and the surgeon cannot afford to lose 75% of the revenues she generates.³⁸

The surgeon reluctantly has to shut down the home rehabilitation and support services program. As a result, in the third year, 20 patients who might have benefited from the program have to be sent to a skilled nursing facility instead. This costs the payer an additional \$200,000 and increases the average spending per patient back to where it was originally.

	BASE YEAR	YEAR 1	YEAR 2	YEAR 3
Surgeon payment per patient	\$1,200	\$1,200	\$1,200	\$1,200
Hospital payment per patient	\$12,000	\$12,000	\$12,000	\$12,000
% patients in SNF	40%	20%	20%	40%
SNF payment per patient	\$10,000	\$10,000	\$10,000	\$10,000
Total payment per patient	\$17,200	\$15,200	\$15,200	\$17,200
# of patients	100	100	100	100
Total spending	\$1,720,000	\$1,520,000	\$1,520,000	\$1,720,000
Savings		\$200,000	\$0	(\$200,000)
50% Shared Savings		\$100,000	\$0	\$0
% patients on home support		20%	20%	0%
Home support cost per patient		\$4,500	\$4,500	
Total home support cost		\$90,000	\$90,000	\$0
Profit/Loss on home support		\$10,000	(\$90,000)	\$0
Net income for surgeon	\$120,000	\$130,000	\$30,000	\$120,000
Change in net income		+8%	-75%	0%

4. Shared Savings/Shared Risk programs do not enable patients and payers to determine the total amount that will be paid for all services to treat a particular condition, or to compare costs across providers prior to the delivery of care.

Although the shared savings/shared risk system requires a calculation of the total spending on the patients cared for by a participating provider, that calculation occurs after care has already been delivered. Moreover, the spending measure is an average for a group of patients, not the actual spending for any individual patient. Even if the provider stated in advance exactly what services were going to be delivered to the patient and what the fee-for-service payment rates for those services would be, the payer would not know the final actual payment until after the expected spending amount was determined (which also occurs after care has already been delivered) and after that amount was compared to the actual spending amount. If the provider qualified for a shared savings bonus, it would increase the total amount the provider received from the payer. If the provider was liable for a shared risk payment, it would reduce the total payment.

Knowing what shared savings bonus or shared risk penalty a provider received last year may be of little help in predicting what the provider will spend next year because of year-to-year changes in the comparison group used to estimate savings and because of random variation in spending amounts from year to year. Most shared savings models compare the average spending on a provider's patients to the average spending on patients whose providers are *not* participating in the shared savings model. However, if the providers participating in the shared savings model change from year to year, then the comparison group will also change, and this can make the same level of spending look low one year and high the next.³⁹ In addition, a provider may be awarded a shared savings bonus or assessed a shared risk penalty in a year simply due to random variation in patients and spending rather than due to anything that the provider intentionally does to reduce the cost of care for patients. These random variations are much more likely for small providers and also for small self-insured purchasers.⁴⁰

Most shared savings and shared risk payment systems do not have any provision for adjusting an individual patient's payments based on savings and costs. Because shared savings/shared risk payment models still use the underlying fee-for-service payment system, the patient will pay standard cost sharing amounts for the services they receive. In a shared risk model, if the provider delivers unnecessary services to patients such that average spending is higher than expected, the provider will need to repay a portion of that excess spending to the payer, but there is no provision for returning the patients' share of that spending to the patients.

B. Why Shared Savings/Shared Risk Programs Don't Preserve the Strengths of Fee-for-Service

The analysis above demonstrates that shared savings and shared risk models do not solve the biggest problems with fee-for-service and they may make some of them worse. Moreover, shared savings/shared risk models can be less desirable than fee-for-service system in several key ways.

5. Providers could be paid more by not helping patients with their problems

Under a shared savings model, not delivering a service at all means the provider would not receive the fee associated with that service. However, the provider could receive a shared savings payment if the non-delivery of the service reduces spending below expected levels. Even though the shared savings payment will be less than the fee the provider would have received had the service been delivered, the provider would also avoid incurring the costs associated with delivering the service. This creates the possibility that *not* delivering a service would be more profitable than delivering it. If the service that is not delivered was not really necessary, then everyone could benefit from this – the patient no longer receives an unnecessary service, the payer spends less, and the provider is more profitable. But as noted earlier, there is no assurance that the avoided service was unnecessary; if the service was necessary but the patient didn't receive it, the patient could be harmed.

Since the shared savings payments are based on *total spending* on all of the services the patient receives from all providers, not just the services delivered by the provider eligible for shared savings payments, the provider can also be paid for *not ordering a service* for the patient from a different provider. Here again, if the service was not necessary in the first place, this would be a desirable outcome. However, if the service was necessary, it could be a serious problem for the patient. The revenue for the service would have gone to a different provider, and the provider who does not order the service is eligible for the shared savings bonus. This means that it now becomes very profitable for a physician or other clinician in a shared savings program to *not* order a service for a patient than to order one, regardless of whether the service was necessary or not. In contrast, under fee-for-service, there is no financial benefit or penalty to a provider for ordering or not ordering a service that another provider would deliver.

6. Providers could be harmed financially for serving patients with greater needs

Under a shared savings system, providers are still paid separate fees for each individual service, so at any given point in time, a provider will be paid more for delivering more services to a patient who needs more services. However, when a provider delivers more services to any individual patient, the provider's overall average spending per patient will increase. That could reduce or

eliminate a shared savings bonus or trigger a shared risk penalty for the provider, depending on the extent to which the higher amount of spending matches what the payment methodology determines is “expected.” This means that the provider’s total revenues could decrease as a result of providing more care for higher-need patients.

Ideally, the calculation of expected spending would prevent this by adjusting for differences in patient needs. If Provider A’s patients *need* more services than the patients of Provider B, then the “expected spending” level for Provider A should be *higher* than for Provider B, and Provider A would not be penalized for delivering more services than Provider B. Conversely, if there is no difference in the needs of the patients served by Providers A and B, but Provider A delivers more services than Provider B, it could be appropriate to penalize Provider A for delivering unnecessary services. This requires a system to measure which patients need more services, which is commonly referred to as “risk adjustment.”⁴¹

Although most shared savings and shared risk models incorporate some type of risk-adjustment system as part of the methodology for determining expected spending,⁴² these risk adjustment systems do a poor job of identifying and adjusting for difference in patient needs.⁴³ One reason for this is lack of data – the risk adjustment systems used in shared savings/shared risk models rely on claims data for measuring differences in patients’ needs, and some of the most important aspects of patient needs are not collected as part of claims data.⁴⁴ However, even when the data are available, key aspects of the data are often intentionally ignored.⁴⁵

7. A provider’s payment does not depend solely on actions and costs that the provider can control

The most common shared savings/shared risk systems define savings or losses based on changes in the total spending on *all* services the patient receives from *all* providers during a period of time. Since very few patients receive all of their healthcare services from a single physician or other healthcare provider, a shared savings/risk program inherently places the providers being paid through shared savings/shared risk at financial risk for what other providers do or not do. This is particularly problematic for physicians, because the amounts paid to a patient’s physicians typically represent only a small fraction of the total spending on the patient’s care due to the fact that hospitalizations, drugs, post-acute care, etc. are so expensive. This means that bonuses and penalties under shared savings and shared risk models can easily be much larger than under typical P4P systems. In the example at the beginning of this section, the \$200 bonus or penalty payment is equivalent to 40% of the physician group’s fee-for-service payments, which is much more than the change in payments under any P4P program.

One can subdivide the total spending on a patient’s care into five categories:⁴⁶

- I. services both *ordered and delivered directly by the physician or other provider participating in the shared savings payment model*;
- II. services delivered by *other* providers that are *integrally related* to services delivered by the provider subject to the shared savings payment (e.g., the services of an anesthesiologist are integrally related to the services delivered by a surgeon);
- III. services delivered by *other* providers that *resulted from orders or referrals* from the provider subject to the shared savings payment;
- IV. services delivered both other providers that were directly related to services delivered or ordered by the provider subject to the shared savings payment (e.g., treatment for an infection that resulted from surgery); and
- V. all other services the patient received that are *unrelated* to the services delivered or ordered by the provider subject to the shared savings payment.

In each successive category, an individual provider has less and less ability to control or influence spending. Most shared savings programs calculate savings based on the total spending on all services the patients receive, including services in Category V. The larger the proportion of total spending that falls into the higher numbered categories, the more likely it is that a provider will be rewarded or penalized based on things for which they were not directly responsible. For example, in the CMS Oncology Care Model, medical oncology practices are eligible for bonuses or penalties based on total spending on all types of services their patients receive from all providers while the patients are receiving chemotherapy from the oncology practice, including services that have no relationship to the cancer treatment and that the oncologist is unlikely to be able to influence.

8. Providers do not know how much they will be paid before services are delivered

A provider in a shared savings or shared risk model would no longer know how much they would ultimately be paid for their services until after the care is delivered and after the shared savings/ shared risk payments are determined. Even if the provider has a clear plan for what services they will deliver to a patient and even if they follow through on that plan, they will not be able to determine how much they will be paid. This is because shared savings/shared risk payments depend not only what that provider does for that patient, but also on what other providers do (since the measure of spending includes services delivered by other providers who are involved in the patient’s care), on what services other patients receive from the provider (since the measure of spending is averaged across all of the provider’s patients), and on what services the patients of other providers receive (since the expected spending calculation is based on services delivered by a comparison group of providers).

Moreover, the broader the range of services that is included in the spending measure that is used to determine shared savings/shared risk payment for individual providers, the greater the difficulty of determining which provider was responsible for any savings or increase in spending that did occur and which provider should receive bonuses or penalties based on that. If two providers are treating different health problems for a patient, and if both providers are accountable for the “total cost of care” for the patient, then rules have to be created for allocating any increases or decreases in total spending between the two providers. Because of the overlaps among many of its shared savings programs, CMS has had to create complex rules that (1) preclude some providers from participating in a shared savings program if other providers in the same community are participating in a different shared savings program, and/or (2) assign some providers “precedence” over others when savings occurs. For example, Accountable Care Organizations participating in the Medicare Shared Savings Program have protested the CMS decision to allocate savings to providers in the Bundled Payments for Care Improvement Program and Comprehensive Care for Joint Replacement program rather than an ACO to which the patients were also assigned.⁴⁷

C. Is There a Role for Shared Savings/ Shared Risk Payments?

The results of the above analysis are summarized in Table 3. Neither Shared Savings nor Shared Risk programs represent effective solutions to any of the problems with fee-for-service payment. At the same time, they undercut some of the important strengths of the fee-for-service payment system. As a result, it is hard not to

conclude that Shared Savings and Shared Risk programs are actually worse than fee-for-service, not better.

As shown in Figure 1, under Shared Savings and Shared Risk Payment systems, the risk of over-treating the patient caused by the problems with fee-for-service payment becomes a risk of under-treating the patient, with little benefit in terms of true accountability for outcomes and costs.

There is growing recognition that Shared Savings programs do not effectively support true care transformation for providers. For example, although the Centers for Medicare and Medicaid Services (CMS) used a shared savings payment model as part of its initial payment demonstration for primary care (the Comprehensive Primary Care Initiative), it removed the shared savings component when it revised the demonstration, acknowledging that shared savings was not a desirable way to pay primary care practices.⁴⁸

No Other Industry Uses a Similar Payment System

As noted in Section III, no other industry uses the healthcare pay-for-performance model as a way of paying for products or services because it doesn't make any sense to do so. Similarly, no other industry uses the shared savings model as a method of payment. As with pay-for-performance, it is difficult to even imagine how such a system would work in other industries. Using the car-buying analogy from Section III, if you bought a car under a “shared-savings payment system,” you'd still be paying for the individual parts and the time the auto workers took to assemble them, with no way to predict what the total price would be before you committed to pay it. There would also be no warranty against defects in that car. Instead you would get a small rebate on the

TABLE 3

Desirable Characteristics of a Value-Based Payment System	Shared Savings	Shared Risk (Two-Sided Risk)
1. Are providers accountable for appropriateness, high quality, and outcomes of services for each patient?	No	No
2. Do payment rates match the cost of delivering quality care?	No	No
3. Do providers have the flexibility to deliver the highest-value services?	No	No
4. Are patients and purchasers able to determine the total amount they will pay?	No	No
5. Are providers only paid when patients receive help?	Yes	Yes
6. Are patients with greater needs able to receive more services?	Not Always	Not Always
7. Are providers only held accountable for things they can control?	Yes	No
8. Do providers know how much they will be paid before services are delivered?	No	No

price you paid only if all of the *other* owners of that car had fewer repairs than someone had defined as the “expected” rate of repairs. Even if the specific car you bought had a serious manufacturing defect that no other car of that model had, you would have to pay the full cost of repairs for that defect on top of the price that you paid for the car. That type of payment system makes no sense in buying cars or any other product or service, and it makes no sense in healthcare, either.

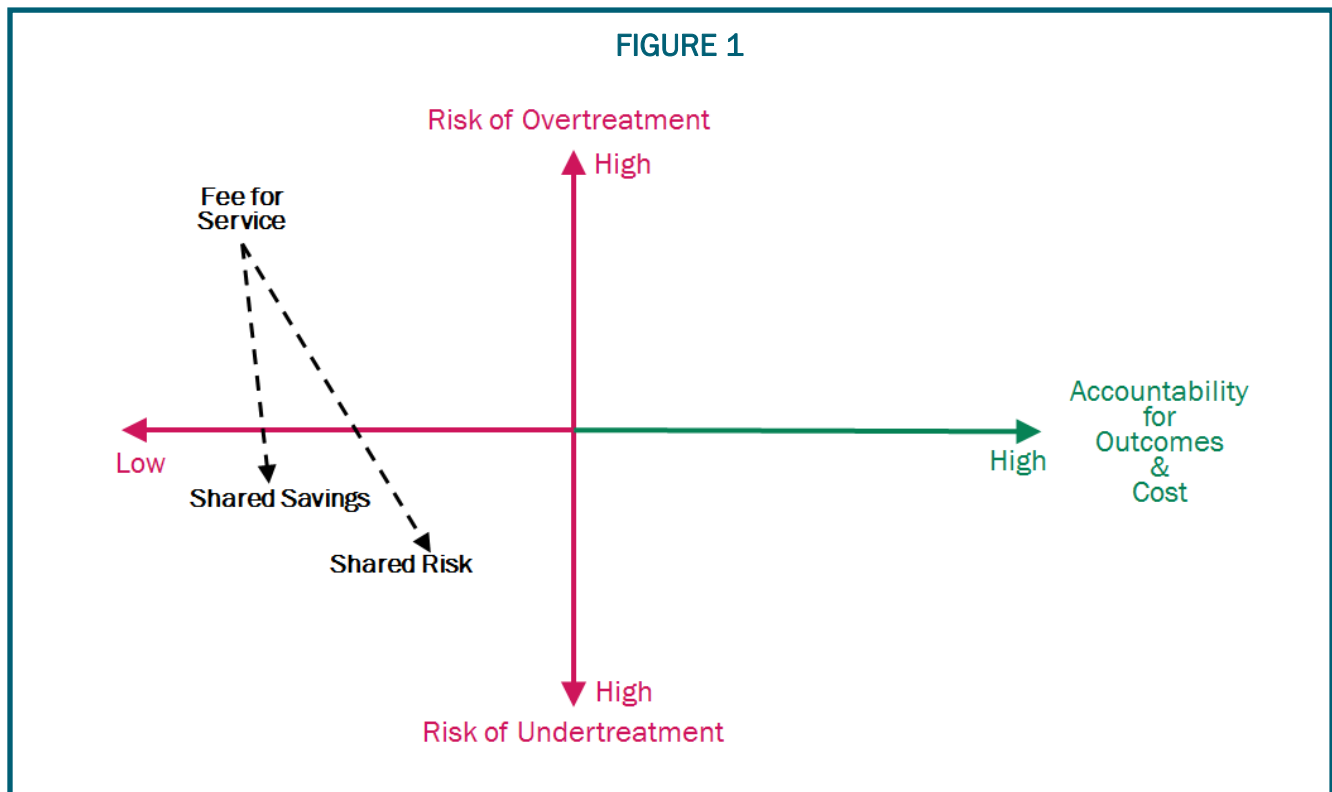
Why Are Shared Savings/Shared Risk Models Being Used By So Many Payers?

Since shared savings/shared risk systems fall so far short of solving the problems with fee-for-service payment and introduce undesirable incentives to stint on patient care, why are they being used so widely? The answer appears to be that a shared savings model is relatively easy for payers to implement – no changes need to be made to the way providers are paid for individual services, and a one-time calculation can be made each year to determine what bonus or penalty is required. In addition, there would seem to be little if any risk involved for the payer, since the payer only makes additional payments to a provider if the payer has already determined that it spent less than it would have otherwise. However, the experience to date in the Medicare Shared Savings Program shows that, in aggregate, a payer can spend more than it might have otherwise by failing to control spending increases for some providers while paying more to those who do generate savings.

Many providers have agreed to participate in shared savings programs not because they believed the payment model would enable them to significantly improve care or reduce costs, but because it provided a mechanism for them to obtain data on total spending for the patients that they had otherwise been unable to obtain, while protecting them against any downside risk. However, having data showing where there are opportunities for savings does little good if the payment system doesn’t actually support the change in care delivery needed to achieve those savings, and as described above, trying to achieve savings can result in significant financial risk.

Higher Value Means More Than Lower Spending

Achieving savings for payers is desirable, and doing so in a way that is feasible for providers is also desirable. However, the value of a healthcare service cannot be measured solely by whether it is cheaper than something else. Spending nothing at all on healthcare services would generate a lot of savings for payers, but it would also harm patients. The goal of a good healthcare payment system should not be to spend nothing, but to spend the right amount to achieve desirable outcomes for patients. Since shared savings/shared risk models have no mechanism for determining what services patients actually need, how much it costs to deliver to those services effectively, and how to pay to support them, they will never be able to support truly high-value healthcare delivery.



V. THE STRENGTHS AND WEAKNESSES OF BUNDLED PAYMENTS

The basic notion of a “bundled payment” is fairly simple: rather than paying separately for every individual healthcare service, a patient or payer pays a single “bundled” price for a combination of two more services. However, because there are so many different services that are paid for individually today, there are also many different ways to bundle those services together.

A. The Many Flavors of Bundled Payments

Although bundled payments are often described as though they were a new concept, various forms of bundled payments have existed for decades. The following are four examples of different types of bundled payment programs that have existed for decades both nationally and in individual communities.⁴⁹

- **Surgical global fees.** A surgical global fee is a bundled payment to a single physician that covers both the surgical procedure performed by the surgeon and follow-up visits with the patient to assess recovery from the surgery. All patients will receive the surgery and most will receive the same number of follow-up visits, so there is relatively little variation in the services actually delivered as part of the bundled payment. Treatment for complications isn't included in the fee, so if the patient experiences a complication that requires a return to the operating room, the surgeon will receive an additional payment for the second surgery.
 - **Hospital Case Rates.** Medicare and many other payers pay hospitals a single bundled case rate for all of the hospital services that a patient receives during the hospitalization. (Services delivered by physicians are paid separately.) The amount of the case rate depends on the reason for the hospitalization, not on how many days the patient stays in the hospital. Although some patients will stay longer in the hospital than others and some will receive more intensive services than others, the payment will not change unless the patient receives a different procedure or develops significant complications. If the patient experiences a complication that requires readmission to the hospital, the hospital will receive an additional payment for the second admission.
 - **Primary Care Capitation.** Under primary care capitation payment systems, a primary care practice receives a single monthly amount for all of the primary care services that practice delivers to a patient, regardless of how many such services the patient needs or receives from the primary care practice. All other services, such as services from specialists and hospitalizations, are paid separately.
 - **Global Capitation.** What is currently referred to as “population-based payment” has been traditionally described as “global capitation.” Under this payment system, a provider or group of providers receives a single bundled payment for all of the services that a patient needs to address all of their health problems.
- In addition, a variety of other forms of bundled payments have been used in demonstration programs or on a limited scale in some states or regions:
- **Hospital-Surgeon Case Rates.** This bundled payment combines the global surgical fee bundle and the hospital case rate bundle into a single, larger bundle covering both the payment to the surgeon and the payment to the hospital for a patient's surgical care in the hospital. Medicare implemented this model in several demonstration projects.⁵⁰ The bundled payments only covered the planned services associated with the surgery; additional payments were still made to the hospital and surgeon if the patient was readmitted to the hospital for complications or required a second surgery.
 - **Hospital Episode Payments.** Hospital episode payments are bundled payments that include (1) the services that the patient receives during a hospitalization, and (2) the services related to the hospitalization that the patient receives during a fixed period of time after discharge (e.g., 60-90 day). The post-discharge services include both planned services, such as a stay in a skilled nursing facility for rehabilitation, and unplanned services such as a hospital readmission required to treat an infection or other complication resulting from the treatment in the hospital. Medicare has implemented hospital episode payments for a number of different types of hospital admissions, including both admissions for surgery (e.g., for hip and knee replacements) and for medical treatment (e.g., for an exacerbation of COPD). A number of private payers have implemented hospital episode payments on a limited scale, primarily for hip and knee replacement surgeries.
 - **Hospital Global Budget.** Under a hospital global budget, a hospital receives a single annual bundled payment based on the size of the population in its service area. The annual payment is intended to support all of the services the hospital delivers to the people living in the service area. The State of Maryland requires that all payers pay hospitals in the state under a global budget model, which means that the amounts the payers pay for hospital services will be adjusted up or down during the course of the year so that the total revenue the hospital receives will stay within the pre-defined budget for the year.

B. Key Differences Among Bundled Payments

Although all of these payment models are “bundles,” they differ in significant ways. Four particularly important differences among bundles are:

1. **The Trigger.** Typically, a bundled payment is intended to cover only the services associated with a particular “trigger” or initiating event.
 - ◆ *Procedure-Based* Bundled Payments are triggered by the delivery of a particular procedure or treatment, and only include services related in some way to that procedure or treatment. In many cases, the payment may also be triggered by where the treatment is delivered, e.g., the treatment must be delivered during an inpatient hospital stay, not as an outpatient procedure.
 - ◆ *Condition-Based* Bundled Payments are triggered by the presence of a particular health problem or risk factor, and include services associated with treatment of that condition regardless of what treatment is used.
 - ◆ *Population-Based* Bundled Payments (e.g., capitation) are triggered by the enrollment of a patient for care, and may include any procedure or treatment that the patient receives for any health condition.
2. **The Scope of Services Within the Bundle.** Some bundled payments are only designed to cover a small number of services that almost all patients receive, so there will be little variation in the services

delivered to different patients. Other bundled payments cover a broader range of services, and the provider has the flexibility to deliver different combinations of services to different patients. For example, hospital case rates (such as the DRG payments in the Medicare Inpatient Prospective Payment System) cover all services delivered in the hospital during the admission, but not any services delivered after discharge.

3. **Inclusion of Unplanned vs. Planned Services.** Many bundled payments are only intended to cover services that are (or could have been) planned in advance as part of a patient’s treatment, whereas other bundled payments also cover *unplanned* services, such as complications resulting from a service or treatment in the bundle.
4. **The Number of Providers Involved.** Some bundled payments only cover the services delivered by one provider, e.g., a physician or a hospital, some bundles may involve the services of a small number of providers (e.g., a physician and a hospital), and other bundles may involve a large number of different providers (e.g., multiple physicians, a hospital, various post-acute care providers, etc.)

Table 4 shows the similarities and differences among the examples described earlier on each of these four characteristics:

TABLE 4

KEY CHARACTERISTICS OF BUNDLES				EXAMPLES
Trigger for Bundle	Scope of Services Within Bundle	Planned vs. Unplanned Services	Number of Providers Involved in Delivering Bundle Services	
Delivery of a Specific Procedure	Few	Planned Services Only	One	Surgical global fees
Delivery of a Specific Procedure	Many	Planned & Unplanned Services	One	Hospital case rates
Delivery a Specific Procedure	Few	Planned Services Only	Multiple	Hospital-physician case rate
Delivery of a Specific Procedure	Many	Planned & Unplanned Services	Multiple	Hospital episode payments
Enrollment of a Patient	Many	Planned & Unplanned Services	One	Primary care capitation Hospital global budget
Enrollment of a Patient	Many	Planned & Unplanned Services	Multiple	Population-Based Payment / Global capitation

C. Key Administrative Components of Bundled Payments

In addition to the four characteristics described above, there are a variety of other design choices about the way bundled payments are implemented that can have an impact on their advantages and disadvantages relative to fee-for-service payment. Three that are particularly important are (1) the time limits on services covered by bundled payments, (2) whether payments replace fee-for-service claims, and (3) how much control providers have over the delivery of services included in the bundle.

Time Limits on Services Covered by Bundled Payments

Ideally, a bundled payment designed to provide accountability for outcomes would include all of the services related to the triggering event, even if those services occur months or years in the future. For example:

- if a patient receives hip replacement surgery, a defect in the hip prosthesis may not reveal itself for many months after the surgery was performed, and the cost of repairing that defect could be substantial.
- if a patient fails to receive an important preventive screening service in a timely fashion, the condition that could have been prevented may not appear until months or even years in the future.

In practice, however, most bundled payments are defined in terms of a fixed length of time in order to facilitate administration by payers. For example, hospital episode payments are typically limited to planned or unplanned services that occur up to 90 days after discharge from the hospital. If any complications occur after 90 days, services needed to treat those complications are paid for using traditional fee-for-service or, if the patient is readmitted to the hospital, the readmission triggers a new hospital episode for the patient. Global capitation payments are usually defined as covering the planned and unplanned services that occur during a one-month or twelve-month period following enrollment of a patient.

Prospective Payment Amounts and Retrospective Reconciliation

In most cases, the amount of payment for a bundle of services is defined *prospectively*, i.e., the provider(s) receiving the bundled payment can determine the amount of the payment before any of the services are delivered, similar to the way fees are known in advance under fee-for-service. An alternative is to define the bundled payment amount *retrospectively*, e.g., by calculating the fee-for-service spending on patients who are not participating in the bundled payment program and then setting the amount of payment for the bundled payment at some percentage below the equivalent FFS payments for the average number of services other providers delivered. However, this approach has the same problems as the shared savings/shared risk models described in the previous section.

It is important to distinguish between the time when the payment amount is established from the time the

payment is actually paid. Many bundled payment programs have *prospectively-defined payment amounts*, but distribute the money using a process called *retrospective reconciliation*. Under this approach, each provider is paid for each individual service they deliver as soon as they deliver it, using the standard fee-for-service billing and payment system. After all services have been delivered, the sum of all of those individual service-based payments is then compared to the prospectively-defined bundled payment amount, and if there is a difference, a reconciliation occurs between the payer and the provider who is managing the bundled payment. If the sum of the service-based payments is less than the bundled payment amount, the payer makes an additional payment to the provider for the difference, whereas if the sum is greater than the bundled payment amount, the provider repays the difference to the payer. This approach is intended to achieve three goals – (1) it improves cash flow for the providers by paying for individual services within the bundle as they are delivered rather than waiting until the end of the episode; (2) it avoids the need for the provider managing the bundled payment to have the ability to pay other providers for their services; and (3) it enables both providers and payers to continue using their existing billing and claims payment systems for most aspects of the bundle, rather than creating totally new methods of billing and payment for an entire bundled amount. Importantly, though, both the provider and the payer know in advance what the final payment will be after the reconciliation occurs.

The alternative to retrospective reconciliation is to distribute the prospectively-defined payment amount to a provider organization as a single lump sum. Although this is usually described as “prospective payment,” the payment is not actually given to the provider until after the care has been delivered. This approach is typically used if only one provider organization is delivering the services; for example, the Medicare Inpatient Prospective Payment System pays a hospital a single “DRG payment” for each hospital stay after the patient is discharged. However, if two or more providers are involved, prospective payment requires one of the providers to receive the payment and then allocate a portion of it to the other providers, or alternatively, creating a new organization controlled by both providers to receive the funds. Most providers do not currently have the capability to pay other providers for their services and they may not trust other providers to pay them, hence the attractiveness of the retrospective reconciliation approach.

Provider Control Over Delivery of Services

If all of the services a patient needs under a bundled payment cannot be delivered by the provider organization receiving the bundled payment, someone must decide which other providers will deliver the services. In traditional fee-for-service programs such as Medicare, the patient chooses which providers will deliver services, but in a bundled payment system, the provider who is managing a bundled payment will want to control which providers are used and what services they deliver. However, this requires Medicare or the patient’s health insurance plan to have a mechanism for denying

payment to providers who deliver services that were not authorized by the provider who is managing the bundled payment. There are mechanisms for doing this for patients who have enrolled in “HMO” insurance plans, but most “PPO” plans do not have similar mechanisms, and under traditional Medicare, patients are statutorily granted freedom of choice to receive care from any provider they wish. As a result, for patients in traditional Medicare and in PPO-style commercial insurance plans, bundled payments may place the provider at risk for all of the related services the patient receives without the ability to control which services the patient will receive or who will deliver those services. This is why provider organizations typically only accept global capitation payments for patients in HMO-style plans, because an HMO-style plan will only pay for services that are specifically authorized by the patient’s primary care provider.

D. “Value-Based” Bundled Payment Models

The advantages and disadvantages of bundled payment programs compared to fee-for-service payment depend heavily on the details of how they are designed. Advocates and opponents of bundled payments often fail to define exactly what kinds of bundled payments have the strengths and weaknesses they are citing, or they focus on a particular type of bundled payment without indicating whether other forms of bundled payment have similar strengths or weaknesses.

Most current “value-based payment” initiatives have focused on two types of bundled payments: (1) Procedure-Based Episode Payments and (2) Global Population-Based Payments.⁵¹ Consequently, the analysis in this section will focus on these two approaches. Since the implementation details can differ significantly even for these two approaches, the analyses in this section will assume these two models are structured in the following ways:

Procedure-Based Episode Payment

For the purposes of the analyses in this report, it will be assumed that under a Procedure-Based Episode Payment:

- the payment is triggered by the delivery of a specific procedure or treatment, i.e., the procedure or treatment has to be delivered in order for the Procedure-Based Episode Payment to be paid.
- the payment is expected to cover all planned services related to the procedure or treatment, regardless of which provider delivered them, up to a maximum period of time (e.g., 90 days after discharge from the hospital where the procedure was performed). In other words, neither the patient nor the patient’s insurer will be expected to pay any more than the Procedure-Based Episode Payment amount no matter how many services are delivered that are related to the procedure or treatment during the 90 period.
- the payment is also expected to cover any unplanned services that occur within a specific period of time

after the procedure or treatment was completed (e.g., 90 days) if they are related to the procedure or treatment, e.g., a readmission to the hospital for complications that occur after discharge.

- a higher amount may be paid if the patient has certain characteristics that are expected to require additional services to be delivered as part of the procedure or that make complications more likely.

For example, the Centers for Medicare and Medicaid Service (CMS) currently has several demonstration projects using variations of the Procedure-Based Episode Payment concept:

- **Bundled Payments for Care Improvement Initiative (BPCI), Model 2.** In BPCI Model 2, CMS works with a physician group or hospital to establish a prospectively-defined payment amount for patients who are hospitalized for one of several specific types of treatment. The payment is expected to cover the cost of the hospitalization, payments to physicians during the hospitalization, and physician payments, post-acute care services, and hospital readmission that occur within a fixed time period (30-90 days) after the patient is discharged.⁵²
- **Comprehensive Care for Joint Replacement (CJR).** In the CJR program, if a patient receives hip or knee replacement surgery, the hospital where the surgery is performed is responsible for the total spending on that patient during the inpatient stay and for 90 days afterward.⁵³
- **Oncology Care Model (OCM), Track 2.** In Track 2 of the OCM program, if a patient receives chemotherapy, the oncology practice which administers or prescribes the chemotherapy is responsible for the total amount of Medicare spending on all of the services the patient receives for six months after chemotherapy begins.⁵⁴

Population-Based Payment

For the purpose of the analyses in this report, it will be assumed that under a Population-Based Payment:

- The patient chooses a provider organization to manage the patient’s care. The organization could be a physician group, and Independent Practice Association of physicians, or a health system.
- The provider organization receives a monthly payment for the patient each month until such time as the patient chooses a new organization to manage their care. This monthly payment is expected to cover most planned or unplanned services that the patient receives from any provider during the month. In other words, neither the patient nor the payer will pay any more than the Population-Based Payment amount regardless of how many services the patient receives, except in specific, pre-defined circumstances.⁵⁵
- The monthly payment may be higher if the patient has multiple health problems or other characteristics that, on average, result in similar patients needing additional services than other patients do.

The Centers for Medicare and Medicaid Services (CMS) does not directly pay any provider organizations in this

way.⁵⁶ However, CMS does pay Medicare Advantage plans this using a very similar approach, and many Medicare Advantage plans then contract with provider organizations to be paid using capitation. In addition, some commercial health insurance plans pay provider organizations in this way.

Some payment models have been proposed that have the elements described above for Procedure-Based Episode Payments and Population-Based Payments except that patients do not enroll with the provider group before care is delivered; instead, the payer “attributes” the patient to the provider group after care has already been delivered, based on which providers delivered services to the patient during a particular period of time. Payment models using attribution methodologies rather than having patients enroll in advance create an additional layer of problems for healthcare providers and patients beyond those associated with the payment model itself. There is a detailed discussion of these problems in CHQPR’s report *Measuring and Assigning Accountability for Healthcare Spending* and so they will not be discussed separately here.⁵⁷

E. Why Bundled Payments Solve Some But Not All Problems With Fee-for-Service

1. Procedure-Based Episode Payments and Population-Based Payments can encourage improvements in some aspects of quality and appropriateness, but they can also create new types of quality problems

Encouraging Prevention of Complications

As discussed in Section II, under typical fee-for-service payment systems, if a healthcare provider commits an error or causes a complication (e.g., an infection due to poor sterile technique during surgery), the provider will not be responsible for the costs of services needed to correct the error or treat the complication, and indeed, the provider may be paid more to deliver those services. In contrast, Procedure-Based Episode Payments and Population-Based Payments generally include all or part of the costs of unplanned services in the payment bundle, such as treatments for related errors or complications. This is equivalent to a “warranty” for the complications, since the provider is obligated to pay for correcting the complications without charging the patient (or payer) more. For example, an episode payment for a surgical procedure is generally defined to include a hospital readmission related to the surgery that occurs within 30-90 days after discharge from the hospital for the surgery. If the patient is readmitted to the same hospital, that hospital will not receive any additional payment, and if the patient is readmitted to a different hospital, the payment to the hospital where the surgery was performed will be reduced by the amount paid to the hospital where the readmission occurred.⁵⁸

Reducing Unnecessary Services

A second problem with traditional fee-for-service payment is that providers are paid for delivering an additional service even if the service is unnecessary. Under Procedural Episode Payments and Population-Based Payments, the provider receives a predefined bundled payment regardless of the number of related services that are delivered. Since delivering an unnecessary service (or ordering it from another provider) would increase the cost for the provider managing the bundled payment but it would not change the amount of payment received, it would reduce the provider’s profit.⁵⁹

In a Procedure-Based Episode Payment, this would discourage unnecessary use of optional services related to the procedure. For example, a Procedure-Based Episode Payment for treating a broken arm would likely include the cost of radiology services, so the provider receiving the bundle would have no reason to order an MRI when a traditional X-ray would serve as well.

However, a Procedure-Based Episode Payment does nothing to ensure that the procedure itself was necessary. If efficiencies encouraged by the bundled payment enable the total payment amount to be lower and the provider’s profit margin to be higher, both patients and providers could be encouraged to use the procedure more often, including in situations where it is not necessary.

This problem does not exist in Population-Based Payments because they are tied to the patient rather than a particular procedure, and the payment is the same even if an unnecessary procedure is performed.

The Risks of Undertreatment in Bundled Payments

However, while Procedure-Based Episode Payments and Population-Based Payments can discourage the use of unnecessary services and procedures, they can also create a financial incentive to *withhold necessary services*, since a provider that delivers fewer necessary services would receive the same payment but incur lower costs and thereby a higher profit. The more services that are bundled into a single payment, the more ways there are to stint on necessary services. In a Procedure-Based Episode Payment, the provider has to deliver the procedure in order to be paid, but there is the potential for leaving out desirable components of the procedure. In a Population-Based Payment system, the provider would still be paid even if a patient failed to receive a procedure that they needed to appropriately treat their health problems.

There is a partial countervailing force to this because *unplanned services* as well as planned services are included in both Procedure-Based Episode Payments and Population-Based Payments, which creates an implicit “warranty” component to the payments. If the failure to deliver or order a service or procedure causes the patient to have a more serious problem for which treatment is unavoidable, the provider would have to deliver or pay for the treatment to address the problem, and the cost of treatment could be more than it would have cost to prevent the problem. For example, if a

provider receiving a Population-Based Payment fails to treat a urinary tract infection (UTI) and that leads to a hospitalization for sepsis, the provider would be responsible for the cost of the hospitalization and that would far exceed the cost of treating the UTI.⁶⁰

However, this is only a partial control on undertreatment for two reasons:

- **Time limits on episode and population-based payments.** In theory, a Procedure-Based Episode Payment could be defined to include services needed to treat any complications of the procedure that arise at any time in the future. As a practical matter, however, episodes are typically defined to last for a fixed period of time, e.g., 90 days following completion of the procedure. Although data indicate that the vast majority of related complications and hospital readmissions for major procedures occur within this time frame, some problems do take longer to appear, and treatment for these problems would require additional payments. For example, if an episode payment for hip surgery includes the cost of hospital readmissions, the surgeon and hospital would be discouraged from withholding services that could result in a higher chance of readmission within 90 days. However, if a lower-quality hip prosthesis was used that failed in five years, when it should have lasted at least ten years, the cost of replacing the prosthesis would not be included in the bundle, so the savings from using the lower-quality prosthesis could increase the providers' profits under the episode payment at the expense of the patient or the payer.

Similarly, monthly Population-Based Payments are designed to cover all of the services that occur during the month in which the payment was received, and patients typically enroll with a provider for a twelve-month period. Consequently, only problems that require treatment within that twelve month period would have to be paid for from the population-based payment. For example, if an individual with chest pain suffers a heart attack because the population-based payment provider did not provide adequate testing or treatment for heart disease, the provider would only be financially penalized if the heart attack occurred during the same year as the chest pain evaluation.

- **No Warranty for Problems Not Requiring Healthcare Treatment.** If failure to deliver needed services results in a poor outcome for the patient that does not require expensive treatment, then there is no direct financial penalty for the provider under either a Procedure-Based Episode Payment or a Population-Based Payment. For example, if a patient dies due to a complication of surgery before treatment can be initiated, there would be no increase in spending under the bundled payment for the surgical episode.

Using P4P to Ensure Quality in Bundled Payments

Many Procedure-Based Episode Payments and Population-Based Payments attempt to prevent undertreatment by adjusting the bundled payment amounts based on quality or outcome measures using standard P4P methodologies. However, these

methodologies have the same flaws as described in Section II whether they are used with bundled payments or traditional fee-for-service payments. Indeed, except for the limited warranty feature described above, typical Procedure-Based Episode Payments and Population-Based Payments are little different from fee for service in their ability to assure patients of good outcomes that are not directly tied to healthcare spending. Under a Procedure-Based Episode Payment, if the procedure is delivered, the provider receives the payment, regardless of whether the patient achieved the desired outcome or not. Under Population-Based Payment, the provider receives the monthly capitation payment whether the patient's health has improved or not.

In addition, the more services that are included in the bundled payment, the more difficult it is to define quality measures that will avoid every potential opportunity for stinting. Using quality measures that require the delivery of particular services (i.e., process measures) may protect against particular forms of undertreatment, but they can simultaneously reduce the flexibility that the bundled payment was supposed to achieve.

Potential Perverse Effects of Risk Adjustment

In traditional capitation payments, a provider organization receive the same monthly payment for each patient regardless of how healthy or sick they are. In contrast, most Population-Based Payment systems incorporate some method of risk adjusting payments, so that the provider organization receives a higher payment for patients with more health problems. Although this helps protect the provider organization against assuming insurance risk, it also can have the perverse effect of harming patients by weakening the warranty feature of the payment. If the provider organization fails to give a patient the care they need and the patient develops a new or more serious health problem as a result, the patient's risk score may increase due to the new or more serious problem, and that will result in a higher payment to the provider organization the next year. Most current risk adjustment systems do not distinguish between health problems that developed *before* a patient came under a provider's care from problems that developed *due to poor care from the provider*.⁶¹

2. Procedure-Based Episode Payments and Population-Based Payments may not align payments with the cost of delivering quality care

In many Procedure-Based Episode Payment and Population-Based Payment programs, the initial amount of the bundled payment is determined by calculating the current average spending per patient under the fee-for-service system on the services to be included in the bundle, and then reducing that average by some amount. The reduction is typically referred to as the "discount," and it is intended to ensure the payer receives some savings from the bundled payment system compared to what the payer was spending under fee-for-service.

Whether a bundled payment established in this way results in a better alignment between the payment and the cost of delivering high-quality care than fee-for-service depends on three things:

- The extent to which the fee-for-service amounts were sufficient to support the delivery of the kinds of services covered by the bundle in a high-quality, appropriate way. If the fee-for-service payment amounts were too low, then the bundled payment amount will also be too low unless the flexibility offered by the bundle allows services to be delivered in a lower-cost but high quality way.
- The extent to which the amount of the discount is based on a realistic estimate of the amount of savings that can be achieved through flexibility provided by the bundle. If the discount is unrealistically high (e.g., if the efficiencies that are possible through the bundle are less than the discount), then the bundled payment will be too low. Conversely, if the potential savings are significantly greater than the discount, the bundled payment may be higher than necessary.
- Whether the bundled payment will be used for the same types of patients who were receiving the individual services in the past. In most bundled payments, some patients will need more of the services in the bundle (or more of the most expensive services), and some will need fewer. If the bundled payment amount is based on an average of the services received by all of those patients, the payment may be adequate as long as a provider has a similar mix of patients. But if a larger proportion of a provider's patients are the patients who need more individual services or more expensive services, the bundled payment amount may fall short of the

EXAMPLE 6

In Example 4 in Section IV, where a hospital is paid \$10,000 for a procedure and has a 10% readmission rate, the hospital would have a deficit if it eliminated readmissions under both fee-for-service and typical shared savings programs. However, under a bundled payment program, if the hospital determined that the cost of delivering care to 900 patients without readmissions is \$9,590,000, it could define a bundled price of \$10,780 for the procedure. That amount would be sufficient to not only cover the hospital's cost for 900 patients but to increase the hospital's profit margin. That amount would also reduce the payer's spending by 2% and deliver better care to the patient. However, if the bundled payment amount was arbitrarily set at 4% below the average fee-for-service spending level of \$11,000, the hospital would only receive \$9,504,000, which would be less than what it would cost for it to deliver the higher-quality care. If the hospital had higher-need patients who were typically readmitted 20% of the time, then even if the hospital cut the readmission rate in half (i.e., to 10%), the \$10,780 payment would be less than the hospital's costs.

average cost of delivering services to that provider's patients. Risk adjustment can mitigate but not completely eliminate this problem, as described in more detail later.

Alignment of Bundled Payments With Fixed Costs of Service Delivery

As noted in Section II, for most types of healthcare services, a majority of the costs associated with delivering the service are fixed, which means that the average cost per patient will depend heavily on how many units of service are delivered. Under fee-for-service payment systems, the payment for a service is the same regardless of the number of services, making it very profitable for a provider to deliver more units of service and very problematic for a provider to deliver fewer services. Procedure-Based Episode Payments partially address this problem. Once the decision is made to deliver the procedure, the payment is the same regardless of how many individual services are used to deliver the procedure. For example, if imaging studies related to the procedure are included in the Episode Payment, then the provider would receive no additional payment for conducting additional imaging studies. The provider would also receive no less payment if it conducted fewer imaging studies, so the revenues would better match the fixed costs of operating imaging equipment.⁶²

However, because the payment for each procedure is the same regardless of how many or how few procedures are delivered, if the provider delivers fewer procedures (e.g., by reducing unnecessary procedures), the provider's profit will decrease because the fixed costs of delivering procedures will remain the same but the total amount of revenue will decrease. Even if the bundled payment amount for the procedure better matches the average costs of all of the procedure-related services at current levels of volume, a gap between payment and costs will appear when the volume of procedures changes, just as it does under fee-for-service.

In contrast, payments under Population-Based Payment Systems are not based on whether a procedure is delivered. This means that delivering fewer procedures to a group of patients will not reduce the provider's revenue, and so the provider is actually rewarded with higher profits by eliminating avoidable procedures.

What about procedures and treatments with low fixed costs and high variable costs? If most of the cost the provider incurs in delivering treatment is an out-of-pocket cost to that provider – for example, an expensive drug or other medical device that is purchased just for the patient – then a Procedure-Based Episode Payment can be a better match for costs than a Population-Based Payment. This is because the provider's costs will increase or decrease significantly when more or fewer procedures or treatments are delivered. Under a Population-Based Payment System, payments would not be increased proportionally if patients needed more procedures. This would cause a significant financial penalty for the provider for delivering the procedures these patients needed. Conversely, the provider would receive a large financial windfall if it withheld procedures from patients who needed them.

TABLE 5
IMPACTS OF DELIVERING ADDITIONAL PROCEDURES ON PROVIDER COSTS, REVENUES, AND PROFITS UNDER DIFFERENT PAYMENTS SYSTEMS

	High Fixed Cost, Low Variable Cost Procedure	Low Fixed Cost, High Variable Cost Procedure
Examples:	<ul style="list-style-type: none"> • Appendectomy • Radiation therapy for cancer 	<ul style="list-style-type: none"> • Knee replacement using an expensive knee prosthesis • Infusion of an expensive chemotherapy drug
Impact on Provider's Cost of Additional Procedures:	Small increase in out-of-pocket cost for delivering additional procedures	Large increase in out-of-pocket cost for delivering additional procedures
Impact on Provider's Revenue and Profits Under Fee-for-Service Payment:	Large increase in revenue and large increase in profit margin for delivering additional procedures or additional services for each procedure	Large increase in revenue, but small increase in profit margin for delivering additional procedures; larger increase in margin for delivering extra services as part of the procedure
Impact on Provider's Revenue and Profits Under Procedure-Based Episode Payment:	Large increase in revenue and large increase in profit margin for delivering additional procedures; reduction in margin for delivering extra services within the procedure	Large increase in revenue, but small increase in profit margin for delivering additional procedures; lower margin for delivering additional services in a procedure
Impact on Provider's Revenue and Profits Under Population-Based Payment:	No increase in revenue and small reduction in profit for delivering additional procedures or services	No increase in revenue and large reduction in profit for delivering additional procedures or services

For example, as explained in Section II, in radiation oncology, most of the payments for treatment are used to cover the high fixed cost of expensive radiation therapy equipment and the provider organization that delivers the treatment generally owns or leases the equipment. Consequently, a Population-Based Payment would provide a consistent and predictable stream of revenue that better matches those fixed costs than would a Procedure-Based Episode Payment. In contrast, in medical oncology, where the cost of chemotherapy is highly variable and the provider organization that delivers the treatment has to pay an external party (a drug manufacturer or distributor) for each drug that is used, a Population-Based Payment could cause significant losses if the provider has a large number of patients who need more expensive treatments and that could lead to stinting on the patients' care.

3. Procedure-Based Episode Payments and Population-Based Payments can potentially give providers the flexibility to deliver high-value services for which fees are not available

One of the benefits of a bundled payment system is the flexibility it can give providers to deliver services that are not paid for under fee-for-service payment without increasing total spending. For example, if a physician group receives a monthly Population-Based Payment for managing patient care instead of fee-for-service

payments for face-to-face office visits with the physicians, the physicians can then respond to patient needs by telephone or email as well as through office visits, or they could hire a nurse to make those contacts and visits if that provides better care to the patient.

However, the fact that the bundled payment is *more* flexible than the current fee-for-service system does not necessarily mean that it provides the *right kind* of flexibility. Procedure-Based Episode Payments are triggered by the use of a particular procedure, and potentially only when the procedure is used in a particular setting. For example, in the Comprehensive Care for Joint Replacement bundled payment model that is being implemented in Medicare, the bundled payment is only paid if the patient receives joint replacement surgery during an inpatient hospital admission. The physician does not have the flexibility to perform the procedure on an outpatient basis, even though a growing number of patients are successfully receiving hip and knee replacement surgery as an outpatient procedure and returning home the same day. This flexibility would exist under a Population-Based Payment system, however.

Moreover, the flexibility of a bundled payment system depends on the administrative system used to implement it. If the amount of the bundled payment is determined based on the number and types of services eligible for fee-for-service payment that the providers delivered in the past, that can significantly reduce or eliminate the providers' flexibility to deliver services in truly different ways, as explained in more detail in

Section IV with respect to retrospective shared savings models.

4. Procedure-Based Episode Payments and Population-Based Payments can enable patients and payers to more easily and accurately determine the total amount they will pay for a particular procedure or for management all of a patient's health needs, and to compare costs across providers prior to the delivery of care.

If the amount of a bundled payment is defined in advance, the patient and payer would know the total amount they would pay for all of the services that are included in the bundle, and they could compare the amounts that would be paid to two different providers for that set of services. Initiatives designed to increase “transparency” about the cost and quality of healthcare services would likely be much more effective if patients can make “apples to apples” comparisons among providers based on bundled payment amounts rather than the fees charged for each individual service.⁶³

F. Why Bundled Payments Do Not Preserve All of the Strengths of Fee-for-Service

The analysis above demonstrates that Procedure-Based Episode Payments and Population-Based Payments solve some but not all of the problems with Fee-for-Service payment and they create new concerns about stinting on care. In addition, they would weaken several of the strengths of Fee-for-Service Payment.

5. Under Population-Based Payments, providers could be paid even if they fail to help patients with their problems

Under Procedure-Based Episode Payments, the provider would still need to deliver the procedure in order to be paid, similar to fee-for-service payment. In contrast, Population-Based Payments are not tied to particular treatments or procedures, so it would be possible for a provider or group of providers to accept the payment for an individual patient without actually helping the patient with their problems. In contrast to shared savings programs, providers would not be paid more for providing or ordering fewer services under a Population-Based Payment program, but they also would not be paid less for providing fewer individual services regardless of whether the patients needed the services. Consequently, as discussed in more detail earlier, there are problematic incentives for undertreatment in a Population-Based Payment system that do not exist in standard Fee-for-Service payment.

6. Under Procedure-Based Episode Payments and Population-Based Payments, providers could be harmed financially for serving patients with greater needs

Under a Procedure-Based Episode Payment, a provider would be able to receive more payment for a patient who needed a procedure, so there would be no financial penalty for treating patients whose specific health problems or other risk factors required the use of that procedure. However, if a patient needed more services as part of a procedure (e.g., they needed additional days of post-acute care after discharge), there would be no additional payment unless the Procedure-Based Episode Payment system included a mechanism for adjusting the bundled payment amount based on differences in patient needs.

Some Procedure-Based Episode Payments have tried to avoid the need for risk adjustment by narrowly defining the patients who are eligible for the bundled payment, but this can lead to so few eligible patients that the bundled payment program has little or no impact.⁶⁴ Where risk adjustment is used, it often fails to adequately adjust for patient needs other than the number and types of comorbidities. For example, even though patients vary significantly in the types and amount of post-acute care they need following discharge from the hospital following hip or knee surgery, the CMS Comprehensive Care for Joint Replacement initiative does not make any adjustments for patient characteristics that affect their need for post-acute care.⁶⁵

Under a Population-Based Payment, the payment would not change regardless of whether a patient needed more procedures or more services as part of a procedure, so a provider whose patients were more likely to require a procedure could experience financial losses unless the payment system had an effective mechanism of adjusting the payment amount for differences in patient needs. One of the criticisms of traditional global capitation systems was the lack of any risk adjustment in the payment amounts. A group of providers received the same monthly payment for each patient regardless of how healthy or sick the patient was, so the profitability of the provider group depended on the health or sickness of their entire patient population. Current versions of global capitation and population-based payments are more likely to include a risk adjustment component, but the risk adjustment systems tend to do a poor job of adjusting for differences in patient needs for the reasons described in Section IV.

If the Procedure-Based Episode Payment or Population-Based Payment also includes adjustments to payment amounts based on the provider's performance on quality measures, there could be further disincentives for the provider to care for higher-need patients, for the same reasons described for Pay-for-Performance systems in Section III.

7. Under Procedure-Based Episode Payments and Population-Based Payments, a provider's payment does not depend solely on actions and costs that the provider can control unless the patient is restricted to using that provider's services

The broader the array of services included in a bundled payment, the less likely it will be that one provider organization will be able to deliver all of the services a patient will need as part of the bundle. For example, in a Procedure-Based Episode Payment for surgery, the patient will likely need services from physicians, a hospital, and post-acute care providers. If any one of these individual providers takes responsibility for managing the episode payment, the revenue and profit for that provider will be dependent on the performance of the other providers.

Rather than any one provider assuming responsibility for the bundled payment, all of the providers could form an organizational entity in which they share responsibility for managing the payment. The revenues for each of the individual providers will then be dependent on the performance of the overall group but they will have the ability to decide how to divide the single bundled payment.

However, the providers' ability to successfully manage such a joint venture is dependent on how much freedom the patient retains to choose the individual providers who will deliver individual services within the bundle. For example, even if a surgeon, hospital, and skilled nursing facility formed an entity to manage an episode payment for surgery, their ability to control costs would be limited if patients receiving surgery had the ability to choose a different skilled nursing facility for their post-surgical rehabilitation. For example, under the Medicare Comprehensive Care for Joint Replacement initiative, the hospital delivering hip or knee replacement surgery will be held responsible for Medicare spending on post-acute care services following discharge from the hospital, but the Medicare beneficiary receiving the surgery is responsible for choosing the post-acute provider(s), not the hospital. If the beneficiary selects a more expensive or lower-quality provider, the hospital will be responsible for the higher costs even though it had no control over the costs.⁶⁶

Population-Based Payment systems such as capitation typically limit a patient's care to the providers who are part of the organization that is receiving the payment or to other providers that organization has a close working relationship with. Although this limits the provider's financial risk, the patient receives no assurance that the providers they are permitted to use will deliver the best care for the patient's needs.

8. Procedure-Based Episode Payments and Population-Based Payment amounts are known before services are delivered

As long as the Procedure-Based Episode Payment system or Population-Based Payment system defines the payment amounts prospectively, the provider receiving the bundled payment would know how much they would be paid before services are delivered, similar to fee-for-service payment. However, the provider's financial viability depends not only on knowing how much will be paid, but knowing what it will cost to deliver the care for which the payment is being made. Those costs will only be predictable if the provider managing the bundled payment has the ability to determine which other providers will be involved in the delivery of services, and as discussed above, many bundled payment systems do not give providers full control over their costs.

As mentioned earlier, some versions of Procedure-Based Episode Payments and Population-Based Payments "attribute" patients to a provider organization after care is delivered rather than requiring the patient to enroll in advance. Attribution-based payment models make it impossible for a provider to know how much they will be paid before services are delivered, since even if the payment amount is defined prospectively, the provider will not know whether that payment amount will apply to any individual patient until after the services have been delivered.

G. Bundling Better

In contrast to P4P and Shared Savings/Shared Risk payment models which merely layer incentives on top of the current fee-for-service system, bundled payments have the potential to change the fundamental structure of payment, and that can enable them to correct some of the fundamental problems with fee-for-service. However, neither of the most common approaches to bundled payment – Procedure-Based Episode Payments and Population-Based Payments – solve all of the problems of fee-for-service payment, nor do they preserve all of the strengths of fee-for-service payment.

As shown in Figure 2, Procedure-Based Episode Payments and Population-Based Payments both require providers to take greater accountability for outcomes and cost than Fee-for-Service payment, but they fail to provide the full level of accountability for outcomes and costs that patients need. Procedure-Based Episode Payments retain many of the risks of overtreatment in Fee-for-Service, while Population-Based Payments introduce significant risks of undertreatment, particularly because of the lack of accountability for outcomes.

No Other Industry Uses "Population-Based Payment"

No other industry uses "Population-Based Payment" as a way of paying for products or services. That is not a surprise; as with Pay-for-Performance and Shared Savings models, it is difficult to even imagine how a Population-Based Payment system would work in other industries. For example, under a "population-based payment system" for food, you would have to choose a

specific grocery store from which to obtain all of your food. You would pay the grocery store a fixed amount of money each month based on the average amount that people spent on food, but then you could take as much food from the grocery store as you wanted by paying at most a small copayment for each food item. If the grocery store didn't carry the specific item you needed, you'd have to choose a different item that they did stock. If the grocery store was out of something, you'd have to wait until it restocked to get what you needed. If a different grocery store had what you needed, or carried higher-quality products, you could go there, but you'd have to pay full price for each of those items even though you'd already paid your regular grocery store a monthly payment designed to cover all of your food needs. If you went to a restaurant where someone prepared your food for you, you'd have to pay the restaurant for the meal out of your own pocket and you'd get no rebate on your grocery store payment even though you would be using less of the store's food. This type of payment system could be very attractive for the grocery store, since it would receive the same amount of money each month from the food-buyers even if the grocery store decided to stock fewer, lower-cost items, but it wouldn't assure the food-buyers they would get the best value for their money.

Pre-payment models are used in other industries, but they are typically used for specific kinds of services or to address specific types of needs, and they are not expected to cover every type of service or need that the individual or business might have. For example, many individuals and businesses purchase maintenance contracts under which they pay a fixed amount of money each month in return for free or low-cost repairs on a particular product that is no longer covered by a warranty, but it would be unlikely that a repair/maintenance firm would accept a fixed fee and agree to repair anything that malfunctions in a consumer's home or in a business's facilities regardless of what products the consumer or business had chosen to purchase.

Procedure-Based Episode Payments Are Closer to the Payment Systems in Other Industries

A Procedure-Based Episode Payment comes much closer to the way businesses in other industries are paid for their products and services than any of the other "value-based payment" systems currently being pursued by Medicare and other payers. Using the car-purchasing analogy from Sections III and IV, under the equivalent of a Procedure-Based Episode Payment model, you would pay a single price for the entire car (rather than separate amounts for each of the parts) and you would not pay extra for any repairs needed to correct manufacturing defects in the specific car that you purchased. That is, in fact, how consumers pay for cars. In the food analogy above, you could choose which grocery store to go to for each type of food you wanted, and you'd pay a pre-defined price for each item of food, which is how consumers pay for food today.

However, Procedure-Based Episode Payments, particularly as they are currently being implemented by payers, diverge from the payment systems used in other

industries in some important ways. For example, the bundled pricing and warranty is typically only available for one specific procedure, not for alternative treatments that might be cheaper and better (e.g., the episode payment may be available for a hip replacement performed in an inpatient hospital, but you would have to pay fee-for-service to have the hip replacement in an ambulatory surgery center, and you would have to pay fee-for-service for non-surgical treatments such as physical therapy). This is equivalent to telling a car buyer they can purchase the luxury model for a fixed price with a warranty, but if they want the non-luxury model, they'll have to pay for the individual parts, pay the auto workers an hourly rate based on how long it took them to assemble the car, and pay extra to repair any defects.

In addition, the warranties for healthcare services in Procedure-Based Episode Payments are much shorter and much more limited than what businesses in other industries offer on expensive products and services. Complications of surgery and failures of medical devices can occur after the typical 30 day or 90 day timeframes in most episode payments, and most procedural episode models don't adjust payments in any way if the procedure fails to achieve the desired benefits for the patient.

Most significantly, however, under current Procedure-Based Episode Payments, the patient and payer have to pay for the procedure even if it fails to the planned outcome and even if the delivery of the procedure failed to meet minimum quality standards, whereas in other industries, a customer would refuse to pay for a product that had been shabbily constructed or failed to perform as expected.

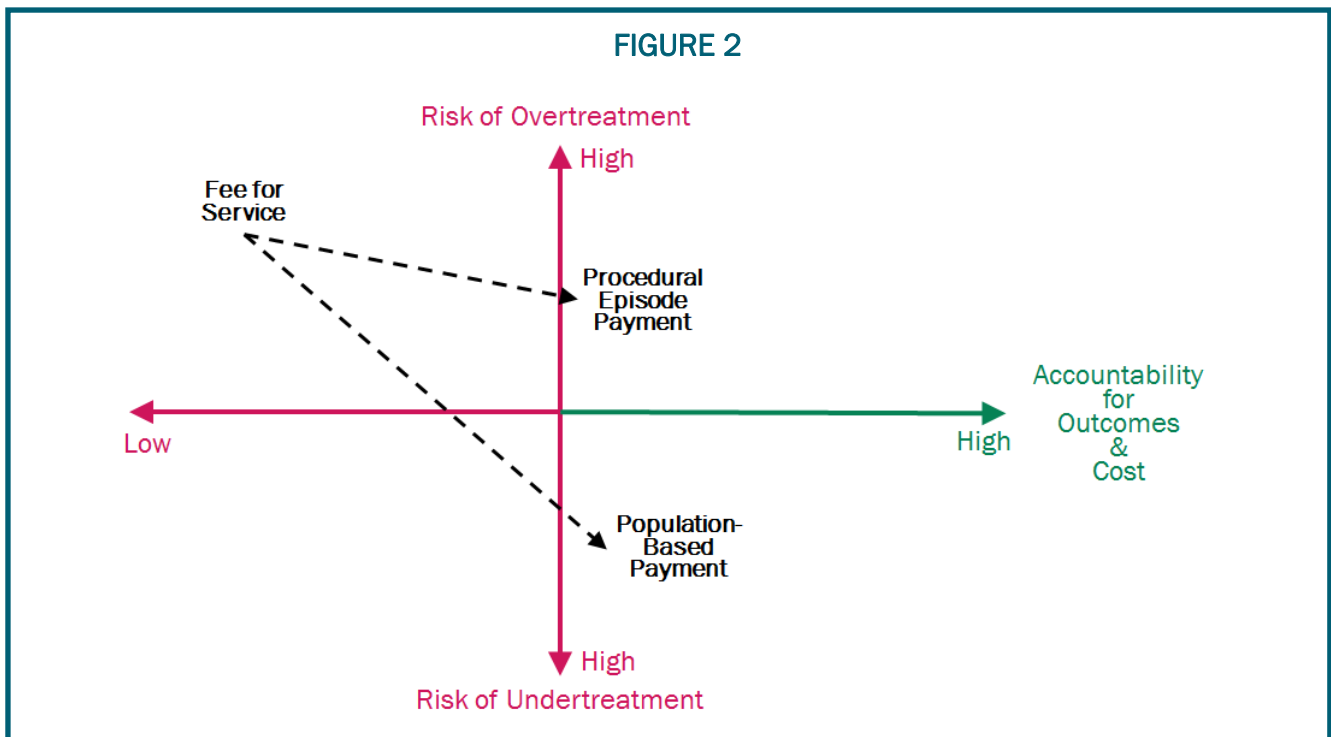
Improving on Current Approaches to Bundled Payments

The fact that current Procedure-Based Episode Payments and Population-Based Payments fail to correct all of the problems with Fee-for-Service Payment and have significant weaknesses relative to Fee-for-Service does not mean all "bundled payments" will have the same weaknesses. In fact, there are ways to create bundled payments that do a better job of correcting the problems with Fee-for-Service payment without creating risks of undertreatment for patients or unmanageable risks for providers. These will be discussed in detail in Section VII.

TABLE 6

Desirable Characteristics of a Value-Based Payment System	Procedure-Based Episode	Population-Based Payment
1. Are providers accountable for appropriateness, high quality, and outcomes of services for each patient?		
• Appropriateness of services within procedures	Yes	Yes
• Appropriateness of procedures	No	Yes
• Short-term complications of treatment	Yes	Yes
• Long-term complications of treatment	No	No
• Desired outcomes of treatment	No	No
2. Do payment rates match the cost of delivering quality care?		
• For high fixed cost, low variable cost procedures	No	Yes
• For low fixed cost, high variable cost procedures	Yes	No
3. Do providers have the flexibility to deliver the highest-value services?		
• Flexibility for services related to a procedure	Yes	Yes
• Flexibility to use different procedures	No	Yes
4. Are patients and purchasers able to determine the total amount they will pay?	Yes	Yes
5. Are providers only paid when patients receive help?	Yes	No
6. Are patients with greater needs able to receive more services?		
• Patients who need a specific procedure	Yes	Not Always
• Patients who need more services as part of a procedure	Not Always	Not Always
7. Are providers only held accountable for things they can control?	Not Always	No
8. Do providers know how much they will be paid before services are delivered?	Yes	Yes

FIGURE 2



VI.

NARROW NETWORKS AND TIERED NETWORKS

A. Overview of Value-Based Network Models

Instead of changing the payment system, an alternative approach that many employers and health plans have pursued in an effort to reduce spending and/or improve quality is the creation of “Narrow Networks.” In a Narrow Network program, the payer chooses a subset of the healthcare providers in a community based on measures of their cost and/or quality, and a patient is required to use those providers in order to receive health insurance coverage from the payer.

In general, in a Narrow Network, there is no change in the method used to pay providers – the providers continue to be paid on a fee-for-service basis. This is typically described as “value-based *purchasing*” rather than “value-based *payment*” because health care is purchased only from a subset of providers that are determined to deliver higher value care than other providers, but the payments to the chosen subset of providers is still fundamentally the same. Whereas value-based *payment* tries to encourage a patient’s *existing* providers to deliver high-value care, value-based *purchasing* tries to steer the patient to a different set of providers who are delivering high-value care. Instead of using higher or lower payment as the incentive to deliver high-value care, value-based purchasing uses the gain or loss of a patient as the incentive to deliver high-value care.

Tiered Networks vs. Narrow Networks

In a Tiered Network, each provider in the community is assigned to two or more “tiers” based on an assessment of their relative cost or quality, and a patient pays a smaller cost-sharing amount if they receive services from the providers in a “preferred tier” (with higher quality and/or lower prices) instead of the providers in a non-preferred tier. To the extent that the cost-sharing differences cause patients to switch from providers in less preferred tiers to more preferred tiers, the patients are more likely to be receiving higher-value care. A Narrow Network is essentially a two-tiered network, with very high costs for the patient if they use the “out of network” tier.

Centers of Excellence

Narrow Networks and Tiered Networks are generally *payer-defined* networks, i.e., the payer determines which providers will be in the Narrow Network or which providers will be in a particular Tier. In contrast, Centers of Excellence are generally *provider-defined* networks that payers choose among. For example, a hospital and a group of surgeons who perform surgery at the hospital could define themselves as a Center of Excellence for a particular type of surgery. The payer will still decide

whether the Center of Excellence will be the only provider a patient can use (i.e., a narrow network consisting of the Center of Excellence) or if the patient can continue to use other providers, and the payer will determine if the patient will receive lower cost-sharing or other benefits for receiving care from the Center of Excellence (i.e., a Tiered Network with preferred status for the Center of Excellence).

Payer-Defined Networks vs. Provider-Defined Networks

A key difference between a provider-defined network and a payer-defined network is that a payer-defined network may not include all of the providers who work together as a team to deliver procedures or manage conditions. This is very problematic when good outcomes or efficient delivery of care requires a coordinated effort among multiple providers. For example, a payer-defined Narrow Network could include a surgeon but not the hospital where the surgeon practices, it could include the surgeon and hospital, but not the anesthesiologists, and it could include primary care physicians but not the specialists they routinely consult with for their more complex patients. In contrast, the providers who work together as a team would likely define the entire team as part of a Center of Excellence.

Combining Value-Based Payment and Value-Based Purchasing

Although typical Narrow Network programs are based on fee-for-service payment, other payment systems could be used instead. For example, some employers are selecting Centers of Excellence not just based on their quality of care, utilization of services, or prices of individual services, but on their willingness to be paid for the patients’ care under a Procedure-Based Episode Payment or other value-based payment arrangement. The advantages and disadvantages that derive from a change in payment methodology are discussed in previous sections, and similar conclusions would apply if the methodology is used in a Narrow Network, Tiered Network, or Center of Excellence model.

Accountable Care Organizations

Most people think of Accountable Care Organizations (ACOs) as a method of payment, since the Medicare Shared Savings Program has a series of shared savings/shared risk payment models that are only available to entities that CMS designates as ACOs. However, the term ACO was developed to describe a method of *delivering* healthcare services, not the method by which payment would be made for those services.

An Accountable Care Organization is, in effect, a special type of narrow network. It was intended to describe a

group of primary care physicians and other healthcare providers that collectively agreed to take responsibility for treating or managing all of the healthcare needs of a group of patients. Although this sounds a lot like a provider-defined Center of Excellence, the way that Medicare and other payers have implemented payments to support ACOs has meant they function more like a payer-defined narrow network. For example, in the Medicare Shared Savings Program, a Medicare beneficiary who is assigned to an ACO can still seek services from any provider eligible for Medicare payment, whether the provider is part of the ACO organization or not. Moreover, in most cases, the ACO only finds out which beneficiaries it is responsible for after the beneficiaries have already received services, so as a practical matter, the ACO is held accountable for all services delivered by any providers in the payer's network that the patient has decided to use.

B. Why Narrow/Tiered Networks Don't Solve the Problems With Fee-For-Service

1. Narrow Networks and Tiered Networks do not ensure that the services an individual patient receives are appropriate, high quality, and achieve the promised results

Most narrow network, tiered network, and Center of Excellence models are based on the assumption that if the providers chosen for the network delivered better quality or lower cost care than other providers last year, patients who switch to the network providers this year will receive better quality, lower cost care than if they had continued using other providers. However, this assumption is flawed for several reasons:

- The quality and cost measures used to select the network providers are averages calculated based on the specific health problems and specific services delivered to the specific patients the providers saw in an earlier year. There is no guarantee that the network providers' performance will be the same if they see different patients who may have different types of health problems or who respond differently to services.
- There is no guarantee that the network providers' performance this year will be the same or better than last year even if they have exactly the same types of patients (or even the exact same patients). The implicit incentive for the providers to maintain or improve their performance is the risk of being dropped from the network next year (or moved to a lower-value tier). However, the strength of this incentive depends on two things: (1) the competitiveness and capacity of the providers in the market and (2) the willingness of patients to change providers every year. For example, if there is only one hospital or physician group that delivers a particular kind of service in the market, then that provider will likely need to be included in the network regardless of their performance. If there are two such providers, the

payer could drop the lowest-performing provider from the network and have all of that provider's patients switch to the other provider. But if that network provider then begins to perform poorly, the payer has to decide whether to force patients to switch providers again.

- There is no guarantee that the best providers in the network have the capacity to serve all of the patients who want to use them. If only the lowest-quality providers in the narrow network have excess capacity, then the new patients in the network will not receive care at the overall average quality of care delivered to all the patients in the network. If the providers in the narrow network or preferred tier do not have the ability to serve all of the patients who are using the out-of-network or non-preferred tier providers, the practical effect of the narrow network will be to increase the portion of treatment costs paid directly by patients (since they will have to pay the higher cost-sharing for out-of-network or non-preferred providers), not to truly improve the value of care.
- There is no guarantee that all of the members of a multi-provider team will be included in the narrow network, which could negatively impact the performance of the team members who are included. For example, if a primary care physician achieves high performance on diabetes quality measures because of the support provided by an endocrinologist, but the endocrinologist is not included in the narrow network, the quality of care delivered by the PCP may decline.
- Because the providers in the network will continue to be paid using the traditional fee-for-service system, there is no guarantee that any individual patient will receive appropriate, high-quality services. Even if, on average, patients receive better quality, lower cost care after they switch to the network providers, an *individual* patient may receive lower quality or higher cost care than they would have previously.
- In small communities, there is often only one provider available, so there is no ability to "narrow" the network. Although a payer could pay to send a patient to a provider in another city or state (essentially broadening the network in order to narrow it), this is not practical for primary care and other types of services.

Because most quality measures are (1) averages across a population of patients and (2) focused on specific types of conditions and procedures, an individual patient may well be able to receive better care for their specific needs from a provider that has lower average quality scores than a provider with higher average quality scores. For example, payers typically either include or exclude an entire hospital from a network, even though hospitals deliver a wide range of services and a hospital can deliver high quality care in many areas while having poor quality in specific service lines. The patient who needs a specific service might well receive better care from a hospital that is excluded from the network than any of the hospitals that are included.

2. Narrow Networks, Tiered Networks, and Centers of Excellence do not ensure that payments match the cost of delivering quality care

In many cases, providers are selected for a narrow network or for favored tiers based on their willingness to be paid less for individual services than they had previously received. Both payers and providers justify this “discount” on the presumption that the provider will be able to deliver more services by participating in the narrow network (since patients will have to switch from the out-of-network providers). However, if there is only one provider in the community that provides the service, that provider is presumably already treating all of the patients there are to treat.

Even if there are multiple providers in a community, increasing the volume of services to offset a reduction in payments is only feasible for a provider that is not already operating at full capacity. If a physician’s schedule is full, or a hospital’s beds are filled, then participating in the network may enable the physician or hospital to maintain current levels of services, but the discount will simply reduce their revenue, and depending on the size of the discount and the proportion of total patients affected, that could make the physician practice or hospital insolvent. If the narrow network discount only involves a subset of the provider’s payers, the provider may raise its prices for other payers, resulting in a shift in costs between payers rather than a true increase in value.

In theory, a provider with excess capacity could charge less for individual services if they deliver more services because a high proportion of most providers’ costs are fixed. However, there is ordinarily no direct connection between the discount a provider is asked to accept and the change in the volume of services they will have the opportunity to deliver, nor is any effort made to determine whether the discount will result in a payment level that is higher or lower than the cost of services at the new volume of services. Consequently, the combination of the discount and the change in volume may or may not mean that payments are better aligned with costs than previously.

Moreover, because the provider is still paid on a fee-for-service basis, the payment for each service will generally be significantly higher than the marginal cost of the service, even with the discount. This means that the provider is still rewarded financially for delivering unnecessary services and penalized for avoiding them. Indeed, the incentive to deliver unnecessary care may be even greater since the provider in the Narrow Network is being explicitly told that it should expect to offset revenue losses from the discount on payments by delivering a higher volume of services. (It is ironic that a system intended to “move from volume to value” would only reward value through higher volume.)

There will also be an increased incentive for the out-of-network providers to deliver unnecessary care or to raise their prices, since if they lose patients to the network providers, the only way for them to make up the loss in revenue will be to raise their prices or to increase the number of services to the patients they do see.

A number of national employers have created Centers of Excellence programs in which patients can travel to a healthcare provider in a different city or state to receive a specific healthcare service (e.g., knee replacement or cancer treatment) that has been deemed to be higher quality and/or lower cost than what the patient could have received in their home community. A problem with these programs is that if the Center of Excellence has excess capacity in a high fixed-cost service line, the marginal cost of serving the patients coming from another community may be very low, so the Center of Excellence provider can charge the out-of-town payer much less than the Center of Excellence charges its local payers and much less than a local provider in the patient’s community can charge. This may save the employer money for the patient who uses the Center of Excellence, but it may result in higher prices for all the other services in the local community (if the local providers have to raise their prices on other services to make up for the losses on the services sent to the Center of Excellence) and it may result in higher prices for the employers and patients in the community where the Center of Excellence is located (if the Center of Excellence charges its local patients more in order to charge its medical tourists less).

3. Narrow Networks, Tiered Networks, and Centers of Excellence do not give providers the ability to deliver high-value services that are not supported under fee-for-service

Because the providers in a Narrow Network are still paid under the standard fee-for-service system, they will not receive any payment for delivering high-value services that are not eligible for fees. Moreover, if the discounts required for participation in the network are not offset by corresponding increases in the volume of services, providers who had used positive margins on reimbursable services to pay for non-reimbursable services may no longer be able to do so, making patients worse off than under the current system. For example, if physicians have to see more patients during the day to offset the loss of revenue from discounted payments for office visits, they may have less time to provide consultations to help other physicians or to coordinate with other physicians regarding a patient’s care.

4. In Narrow Networks and Tiered Networks, patients and payers would still be unable to determine the total amount that will be charged or paid for all services to treat a particular condition, nor will they be better able to compare costs across providers

Since the providers in a narrow network are usually still paid separate fees for their individual services, Narrow Network and Tiered Network models provide no greater ability for a patient or payer to predict the total cost of care for the patient or to compare the total cost of care to other providers. In fact, the total cost of care for a procedure may be even less predictable if the providers included in the network do not have adequate capacity to deliver all of the services patients need and services

from out-of-network providers are needed. There are reports of patients and their payers experiencing unexpectedly high total costs for procedures due to high out-of-network charges from providers who are needed to deliver a service (e.g., the only anesthesiologist available for a time-sensitive surgery is an out-of-network physician).⁶⁷ Even in a Center of Excellence program, the payment to the Center of Excellence may only cover the services the Center itself provides, not the additional services the patient may need after they return home.

C. Why Narrow/Tiered Networks Preserve Most of the Strengths of Fee-for-Service

Narrow Networks, Tiered Networks, and Centers of Excellence do not solve the problems with fee-for-service because in general, providers are still paid fee-for-service. Although this also means that they preserve most of the strengths of the fee-for-service system, the methods of selecting providers for the network can create some potentially undesirable effects. (In some Center of Excellence programs, the providers are paid using a bundled payment system, and many payers use pay-for-performance programs or shared saving payment systems to pay the providers in the narrow network they create. The discussion below only applies to the impacts of the Narrow Network model itself, not to any changes that are also made to method of payment.)

5. Providers continue to be paid only if they help patients with their problems

Because there is no change in the fee-for-service payment system in most Narrow Network and Center of Excellence programs, the providers will generally only be paid when they actually deliver a service to a patient.

6. Higher-need patients could have greater difficulty accessing affordable care

Because there is generally no change in the fee-for-service structure, providers in a narrow network would still receive more payment when more services are delivered. However, many payers select which providers to include in a narrow network based on measures of the rate at which providers deliver or order various kinds of services. Unless those measures are effectively risk-adjusted, a provider who cares for a higher-need set of patients might be rated by the payer as an “expensive” provider and the payer would then drop that provider from the network, even though the cost of care for the payer’s patients might increase when they are forced to use other providers.

In addition, if the providers in the Narrow Network do not have sufficient capacity to provide all of the services all of the patients need, they could choose to be more selective about the patients they agree to care for. If they have agreed to accept lower fees as part of the Narrow Network, they would be less likely to want to treat high-need patients who require higher-than-average amounts of time. As a result, the high-need patients could have

difficulty obtaining timely care within the Narrow Network, and seeking care outside the network could require them to pay much higher amounts for their care.

7. A provider’s payment would not depend solely on actions and costs that the provider can control

The measures of utilization or spending used by many payers to select whether a provider will be included in a Narrow Network are not always limited to the services that specific provider delivered or ordered. Many “episode cost” measures and “total cost of care” measures tabulate all of the spending on all services that a patient received in conjunction with a particular episode of care or during an entire year. As explained in more detail in Section IV, while some of those services may have been delivered or ordered by the provider being evaluated (or they have been needed to address a complication that was caused by or could have been prevented by the provider), other services may have been delivered by other providers, and the provider being evaluated may have had no ability to control whether or how those services were delivered. Similarly, the quality measures used by a payer to evaluate a provider may be affected by factors beyond the provider’s control.

8. The payment amounts are known before services are delivered

Since providers in most narrow networks are still paid under a standard fee-for-service system, they will know how much they will be paid before they actually deliver a service to a patient.

D. Is There a Role for Narrow Networks and Tiered Networks?

As summarized in Table 7, Narrow Networks and Tiered Networks fail to address the problems of fee-for-service payment and may weaken some of its strengths. A Center of Excellence program may do more to solve the problems of fee-for-service payment, but it depends on the method of payment that is used; merely sending patients to a group of providers that have been labeled as “excellent” based on past performance does not assure patients they will receive high quality care, and lower prices charged to distant purchasers may be achieved through higher prices to local purchasers.

Payer-defined Narrow Network and Tiered Network models have the potential to encourage higher-value care for specific types of services in specific communities. If a community has multiple providers who deliver the same service, and if there is a significant difference in the performance of those providers, then encouraging patients to switch from lower-value to higher-value providers could lead to lower spending or higher quality. However, these conditions are far more likely to exist in large urban areas than in small and rural communities.

If communities have multiple providers but there is little difference in performance, the ability of Narrow Net-

works to encourage higher-value care will depend on the nature of the opportunities for improvement. To the extent that providers can perform better but are unwilling to do so, Narrow Networks create a more powerful incentive to improve than typical Pay-for-Performance systems because a provider who is excluded from the Narrow Network would lose 100% of the payments for a payer's patients rather than just the small percentage of payments that would normally be affected under a P4P or Shared Risk program. However, if barriers in the fee-for-service system are preventing providers from performing better, a Narrow Network will likely have little effect if it does not also change the method used to pay providers.

On the other hand, if significant changes are also made in the way providers are paid, a Tiered Network or Center of Excellence approach could be a desirable complement. Rather than trying to force all providers into a new

payment model or to establish one single performance standard for all providers in a new payment model, patients could be encouraged to use the providers who accept greater accountability for cost and quality and to use providers that can achieve lower costs or higher quality using the flexibility of a new payment model. In addition, if bundled payment approaches are used, providers will likely want to ensure that patients only receive care from the providers who are working to manage services under the bundled payment; these provider Teams would function similar to Narrow Networks, except that they would be defined by providers rather than a payer.

TABLE 7

Desirable Characteristics of a Value-Based Payment System	Narrow & Tiered Networks	Centers of Excellence
1. Are providers accountable for appropriateness, high quality, and outcomes of services for each patient?	No	Not Always
2. Do payment rates match the cost of delivering quality care?	No	Not Always
3. Do providers have the flexibility to deliver the highest-value services?	No	Yes
4. Are patients and purchasers able to determine the total amount they will pay?	No	Not Always
5. Are providers only paid when patients receive help?	Yes	Yes
6. Are patients with greater needs able to receive more services?	Not Always	Not Always
7. Are providers only held accountable for things they can control?	No	Not Always
8. Do providers know how much they will be paid before services are delivered?	Yes	Yes

VII. CREATING A PATIENT-CENTERED PAYMENT SYSTEM

A. The Need for a New Value-Based Payment Paradigm

As explained in the previous sections, none of the “value-based payment” and “value-based purchasing” systems that are commonly being implemented across the country today truly correct the problems with Fee-for-Service Payment that were described in Section II. Moreover, these systems can create new problems for patients that do not exist in the Fee-for-Service system, such as risks of under-treatment and reduced access to care, and they can create new administrative burdens for healthcare providers that could also reduce access to quality care. It should not be surprising, therefore, that these payment “reforms” have failed to achieve the desired effects in controlling costs or improving quality and that they have not been enthusiastically embraced by patients or healthcare providers.

More Risk Won't Create Better Results

Many purchasers and policy-makers have been led to believe the cause of the weak results is that the “incentives” in value-based payment systems aren't strong enough to “change provider behavior.” Proposed solutions have focused on increasing penalties in P4P systems, adding downside risk to shared savings models, increasing the magnitude of risk for providers in shared risk models and bundled payments, and pushing patients and providers into full-risk capitated payment systems. But the analyses in the previous sections make it clear that the weaknesses in current value-based payment systems cannot be solved by increasing the size of the financial penalties or risk imposed on healthcare providers. An entirely different paradigm for value-based payment is needed.

A Better Paradigm for Payment Reform – Patient Centered Payment

Both Fee-for-Service and current approaches to value-based payment and purchasing have a common flaw – their central focus is on how to *pay providers for services* or how to *reduce spending for insurers*, not on how to achieve *good healthcare outcomes* for patients at the *most affordable cost* for both patients and their insurers.

Fee-for-Service payment is the most *provider-centered* system. Each individual provider of healthcare services is paid separately, based on each specific service that provider delivers, regardless of the result that is achieved for the patient who receives the service or the total cost of all the services combined. Although Fee-for-Service payment has a number of strengths from a patient's perspective, those strengths are indirect byproducts of features that are designed primarily to benefit the providers of services.

Pay-for-Performance and Shared Savings/Shared Risk programs are *payer-centered* structures layered on top of the provider-centered Fee-for-Service system. Providers are rewarded or penalized based on whether the payer saves money and/or whether the average quality of care is better or worse for all of the individuals the payer insures, but each provider is still paid separately for each individual service, regardless of the result achieved for the individual patient who receives the service.

Most Narrow Networks are also *payer-centered* structures that maintain the structure of the provider-centered Fee-for-Service payment system. Payers select a subset of providers based on the providers' willingness to accept lower fees for their services or because they had higher than average performance on quality and cost measures. The payer then encourages or requires a patient to use only those providers, regardless of whether other providers could achieve better results at lower cost for that individual patient, and each provider is paid for each service delivered, regardless of the result achieved for the individual patient who receives that service.

Bundled Payments are the only approaches that move the fundamental structure of payment away from traditional Fee-for-Service rather than simply layering incentives on top of it. Because of this, Bundled Payments have greater potential to correct the fundamental flaws of Fee-for-Service payment than other approaches to value-based payment and purchasing. However, the devil is in the details, and most current bundled payment systems are designed in either provider-centered and/or payer-centered ways. For example, the most common Bundled Payment programs – Procedure-Based Episode Payments – remain tied to a particular type of service that specific types of providers deliver, and their primary goal has been reducing spending for payers, not achieving the best result for a patient's needs. Most Population-Based Payments have been explicitly designed to reduce total spending while maintaining or improving average quality for group of patients who happen to be insured by a particular payer, not to ensure that individual patients receive the best outcomes at the lowest cost.

In contrast, a truly *patient-centered* payment system would correct the problems of Fee-for-Service payment while preserving its strengths, and its central focus would be achieving the best outcomes for individual patients at an affordable cost for both patients and insurers.

A Patient-Centered Payment system would:

- Enable patients to have their specific healthcare need addressed by a team of providers that have agreed to work together to achieve specific, feasible outcomes for that need;
- Enable patients to select which provider team to use based on the quality standards and outcomes that each provider team commits to achieve for that patient and based on the total amount that the patient and their insurer will pay for all of the services the patient will receive with respect to the need that is being addressed;
- Give the team of providers adequate resources and sufficient flexibility to deliver the most appropriate combination of high-quality services to achieve the best outcomes based on the nature and severity of the patient's need;
- Hold the team of providers accountable for achieving the expected results for each patient in return for the adequate, flexible payment.

A. How a Patient-Centered Payment System Could Be Structured

No one payment method can achieve the goals described above for all patients. Different patients have different health needs, and the number and types of services that will address their needs, the providers who can deliver those services, the costs of delivering the services, and the outcomes that can be achieved will differ depending on the patient's needs. A single group of providers may or may not be able to address all of a patient's needs, and even if they could, a patient may feel that better results would be achieved at a lower cost by having different teams of providers address different subsets of the patient's health problems.

Consequently, a Patient-Centered Payment system will need to customize the method of payment to match what the patient needs as well as what is feasible for providers to manage. Separate types of payments will likely be needed to adequately address the differences in outcomes and services for each of the following four categories of patient needs:

- **Preventive Care** – helping a patient avoid developing new health problems.
- **Diagnosis and Treatment Planning** – determining the cause of new symptoms, and identifying and choosing the best treatment option if it is determined that a new health problem exists.
- **Treatment of an Acute Condition** – treating a diagnosed health condition that can ordinarily be resolved within a limited period of time, e.g., a bone fracture or pneumonia.
- **Management of a Chronic Condition** – managing and treating a diagnosed health condition that is expected to persist over a long period of time, potentially until death, e.g., chronic obstructive pulmonary disease or diabetes.

1. Categories of Patient-Centered Payments

At least nine separate types of Patient-Centered Payments are needed to support effective care for the four different types of healthcare needs:

- **Preventive Care.** Two separate types of payments are needed to support services that help a patient avoid developing new health problems.
 1. **A Monthly Preventive Services Management Payment.** A Preventive Care Management Team selected by the patient should receive a monthly bundled payment to provide proactive monitoring of the patient's preventive care needs. The Preventive Care Management Team should be accountable for ensuring that the patient is up to date with all preventive care.
 2. **Procedure-Based Bundled Payments for Appropriate Preventive Services.** When the Preventive Care Management Team determines that an immunization, cancer screening, or other preventive procedure is needed, the patient would select a Preventive Service Team to deliver that procedure. In some cases, the Preventive Care Management Team would also serve as the Preventive Service Team, but if not, the Preventive Care Management Team could help the patient select an appropriate Preventive Service Team. The selected Preventive Service Team should receive a bundled payment to deliver all of the services associated with the procedure and it should be accountable for delivering the procedure in accordance with quality standards and without any avoidable complications.
- **Diagnosis and Treatment Planning.** It is impossible to select the right providers, pay for the right services, or achieve good outcomes for acute or chronic conditions without an accurate diagnosis and an objective assessment of treatment options. Both Fee-for-Service payment and current value-based payment systems assume that an accurate diagnosis and a good choice of treatment have been made, but the payment systems themselves do little to directly support effective diagnosis and treatment planning. A Patient-Centered Payment System needs to provide two types of payments specifically designed to support this critical function:
 3. **Diagnosis and Treatment Planning Episode Payment.** For common symptoms, combinations of symptoms, and diagnoses where standardized protocols can be used for determining the diagnosis, a Diagnostic Team led by a Diagnostic Coordinator selected by the patient should receive a bundled payment for all of the diagnostic testing and evaluation services necessary for accurately determining the diagnosis for the patient's symptoms and for helping the patient understand the treatment options available and decide on a course of treatment.
 4. **Diagnosis Coordination and Treatment Planning Payment.** For unusual symptoms, complex combinations of symptoms, and relatively rare diagnoses,

a Diagnostic Coordinator selected by the patient should receive a Diagnosis Coordination and Treatment Planning Payment to enable them to arrange and manage all of the examinations, testing, and referrals to other providers that are required to accurately determine a diagnosis and to help the patient decide on a course of treatment. A provider selected by the Diagnostic Coordinator to perform one of the individual services during this process should receive a pre-defined fee or bundled payment for that service.

- **Treatment of an Acute Condition.** Three separate types of payments are needed to support treatment services for diagnosed acute health conditions: one type of payment would ensure adequate community capacity for treatment of patients for emergency conditions and for non-emergency conditions that require local treatment, a second type of payment would support the delivery of complete treatment to individual patients who have common acute conditions where there are standardized protocols for treatment, and a third type of payment would support delivery of treatment for uncommon and complex acute conditions. Having three types of payments allows (a) a better match between payments and the fixed costs and variable costs of acute care, and (b) distinctions to be made between conditions where standardization of treatment and predictability of costs and outcomes is possible and conditions where highly customized care will be the norm.

5. Standby Capacity Payment to Support Emergency Services and Other Essential Services. Hospitals and some other providers in the community where an individual resides should receive a monthly or annual payment for that individual in order to sustain the minimum capacity for emergency services and other essential local services needed in case the individual needs one of those services. The provider would not need to deliver an actual service to the individual in order to receive this payment, but the provider would be accountable for having adequate capacity to deliver the service when it is needed and to do so in ways that meet high standards of quality and responsiveness. In communities with multiple emergency departments, each hospital would receive a proportion of these per-resident payments based on the relative rate at which community residents used its emergency department versus the emergency departments at other hospitals, but a hospital would not receive more payments simply because it had a higher volume of visits. In small and rural communities, providers other than hospitals could also receive this type of payment to support non-emergency services that are viewed as essential but have low or variable utilization, e.g., primary care clinics, imaging facilities, etc.

6. Acute Condition Episode Payment. When a patient has a common acute condition and no other unusual characteristics, an Acute Condition Treatment Team selected by the patient should receive a one-

time bundled Acute Care Episode Payment to deliver all of the treatment needed by the patient for that condition. This Team should be accountable for meeting standards of quality in the delivery of the treatment services (including coordinating those services with treatments the patient may be receiving for other conditions), for avoiding complications of treatment, and for achieving pre-defined outcomes for the patient.

7. Acute Condition Coordinated Treatment Payments.

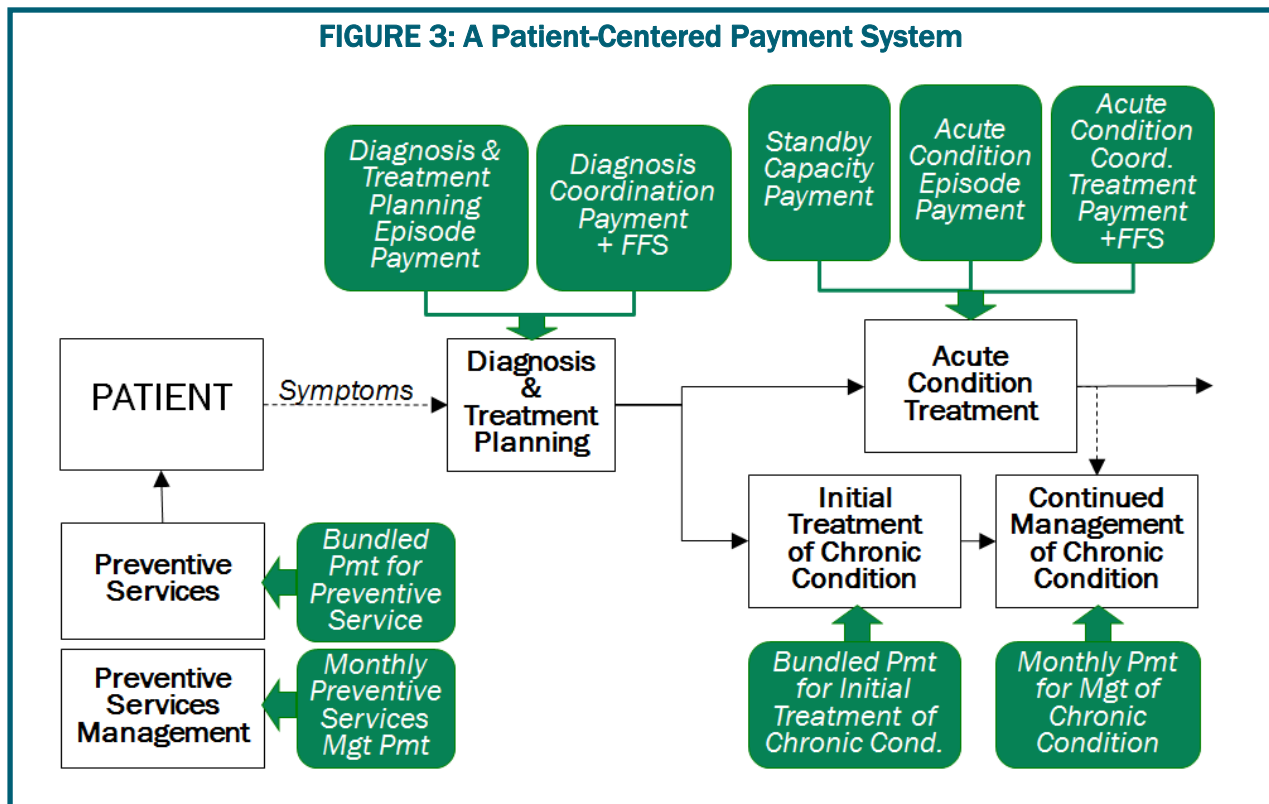
When a patient has an uncommon acute condition or when a patient has a common condition but has other characteristics that require special approaches for treatment of that condition, an Acute Condition Treatment Team selected by the patient should receive (a) fees for each of the individual services the members of the Team deliver to treat the condition and (b) a Treatment Coordination Payment to ensure that all of the services are effectively coordinated and that quality standards are met.

- **Management of a Chronic Condition:** A patient who is diagnosed with a chronic condition will need care over an extended period of time, potentially for the rest of their life, so the types of one-time bundled payments used for acute conditions will not work well for management of chronic conditions. In addition, the initial period following diagnosis of a chronic disease often involves considerably more time in educating the patient about the disease, adjusting medications to achieve the best balance of results, side effects, and cost, etc., than later time periods. Moreover, the initial period and later periods do not necessarily have to be managed by the same team of providers. Consequently, defining a separate payment for the chronic care management that is delivered in the initial period versus the care delivered on a longer-term basis allows for more appropriate definitions of provider teams, outcomes, and pricing.

8. Bundled Payment for Initial Treatment of Chronic Conditions. When a patient is newly diagnosed with a chronic condition or combination of conditions (or the patient is being treated for the condition(s) for the first time following a diagnosis determined in the past), a Chronic Care Management Team selected by the patient should receive a one-time or monthly Bundled Payment to deliver initial treatment, education, and self-management support services for a pre-defined period of time. The Team should be accountable for meeting standards of quality in the delivery of the services (including coordinating those services with treatments the patient may be receiving for other conditions), and for achieving short-term outcomes for the patient.

9. Monthly Bundled Payment for Continued Management of Chronic Conditions. After initial treatment has been completed, Chronic Care Management Team selected by the patient should receive monthly Bundled Payments to deliver ongoing treatment, education, and self-management support services to patients with a chronic condition or combination

FIGURE 3: A Patient-Centered Payment System



of conditions. The Team should be accountable for meeting standards of quality in the delivery of the services (including coordinating those services with treatments the patient may be receiving for other conditions), and for achieving both short-term and longer-term outcomes.

2. Structure of Patient-Centered Payments

These nine types of payments would be structured in ways designed to correct the major weaknesses of the Fee-for-Service payment system while preserving its key strengths:

- **Payment Should Be Made for Complete Bundles of Services Appropriate to the Patient’s Needs.** Each category of payment would represent a “fee” for a “service,” but in most cases, the service would be a complete package of all of the activities needed to address a particular type of healthcare need rather than a single, narrowly-defined action by an individual provider that only represented part of the full set of things required to address a particular patient need. Separate fees for individual services would only be paid for patients with health problems or other characteristics that require highly customized approaches.
- **Payments Should be Made to Teams of Providers That Can Deliver Complete Bundles of Services.** In most cases, a single Patient-Centered Payment would be paid to a Team of providers that had organized itself to deliver all of the services needed to address the specific patient need. Teams would select their own members based on their ability to achieve good out-

comes as a team (rather than being limited to individual providers included in a payer-defined network). Where highly customized services are needed and it is not feasible to pre-define a bundle of services, the Team would be paid fees for individual services but would also receive a payment to support coordination of all of the individual services that the patient needs.

- **Patients Should Choose Provider Teams Rather Than Individual Providers.** A patient would have the flexibility to choose which Team of providers would address a particular health problem the patient is experiencing. Since the providers would be paid to work as a Team, the patient would have to support the ability of the providers to work as a Team by agreeing to use only the members of that Team for all of the services related to the health problem the Team had agreed to address. Patients would have the ability to choose different Teams for different needs or to choose Teams that could address multiple needs, rather than being forced to use one Team for all of their needs.
- **Payment Amounts Should Differ for Different Health Problems.** Although a similar payment methodology would be used for different acute conditions, different chronic conditions, etc., the amount of payment would differ for different conditions, with the amounts based on the expected cost of successfully treating each condition.
- **Payment Amounts Should Differ for Patients With Different Characteristics and Needs.** In treating a particular health condition or combination of conditions, the provider Team would also receive a higher dollar amount for patients who have specific

characteristics that would be expected to require more services or more expensive services. For most categories of payment, the payment amount would not be higher simply because more services were delivered; it would only be higher if the patient had characteristics that would be expected to require more services. Moreover, the characteristics that could affect the amount of payment would not just be diagnosed health problems, but also other factors that affect the patient's and provider's ability to effectively use particular approaches to treatment (e.g., the patient's ability to travel).⁶⁸

- **Provider Teams Should Receive Additional Payments for Costs They Cannot Control.** Provider Teams would also receive a higher dollar amount of payment if the cost of delivering a necessary service increased for reasons beyond their control (e.g., an increase in the price of a drug when there was no alternative treatment available).
- **Provider Teams Should Only Be Paid for Services to a Patient When Standards Are Met and Outcomes Are Achieved for That Patient.** Under Patient-Centered Payments, provider Teams would only be paid for the care delivered to an individual patient if the Team met quality standards in the delivery of care to that specific patient and if the Team achieved specific, pre-defined outcomes for that patient. There would be no payment at all for an individual patient if the standards were not met and the outcomes were not achieved for that patient. The quality standards and outcomes would be based on what evidence shows is feasible to achieve for all or almost all patients with the characteristics associated with a particular payment. Higher outcome standards would be established for patients with certain characteristics if there was evidence showing how to achieve better outcomes for those patients but not for others.

If available treatments were often unsuccessful for certain kinds of high-risk patients, patient with those characteristics who wanted treatment would be assured that treatment would be delivered in a high-quality way, but they would be explicitly told that good outcomes could not be assured. This would enable them to make an informed decision about whether to proceed with treatment, with no negative impact on the provider Team if treatment was delivered but had a poor result. If some provider Teams were willing and able to commit to achieve good outcomes for high-risk patients, patients could choose to obtain their care from those Teams, thereby encouraging increases in outcome standards over time.

- **Care Should Be Coordinated Where Coordination is Most Needed.** Patient-Centered Payments would require coordinated, Team-based care to be provided to address a specific need for a specific patient – either preventive services, diagnosis of symptoms, treatment of an acute condition, or management of a chronic condition. Patients would not be required to use the same set of healthcare providers for every need if they believed that different Teams would provide better care for different conditions. However, because each Team would be responsible for achiev-

ing good outcomes on the particular condition it was addressing, the Team would have to coordinate with other teams if lack of coordination would negatively affect their outcomes. Some Teams might decide they are unwilling to treat a patient for one condition unless the patient also agreed that the Team would treat one or more of the patient's other conditions because of the close connections between the conditions.

Appendix A provides more details on how each of the nine Patient-Centered Payments would be structured.

B. How Patients Would Receive Care Under Patient-Centered Payment

Under a Patient-Centered Payment system, a patient could choose one or more Teams of providers the patient felt would best address their specific healthcare needs in the most cost-effective way. A patient would not be required to obtain all of their care from providers who were part of a single provider organization unless (a) the providers themselves decided to impose that restriction on the patients and (b) the patient voluntarily chose to use those providers and agreed to abide by that restriction.

Care and Payment for a Healthy Patient

A healthy patient with no chronic conditions would choose a Preventive Care Management Team to ensure the patient receives appropriate preventive care based on the most current evidence for individuals with characteristics similar to the patient. For most patients, this would likely be a primary care practice, but some patients might choose a Preventive Care Management Team with special expertise (e.g., a gynecology practice). The Team would receive a monthly Preventive Services Management Payment (either directly from the patient or from the patient's insurance plan) to proactively monitor the patient's need for preventive care, to contact the patient when preventive care was needed and encourage them to receive it, to perform any laboratory tests or imaging studies needed to assess the patient's risk factors, and to help the patient identify and choose appropriate Preventive Service Teams to deliver preventive care procedures when those procedures were needed.

When the Preventive Care Management Team determined that the patient needed an immunization, cancer screening, or other preventive procedure, the patient would choose a Preventive Service Team to deliver that procedure. In some cases, such as immunizations, the patient's existing Preventive Care Management Team could also deliver the preventive care if the patient wished, but in other cases the patient would need to choose a different provider or group of providers with the special skills needed to deliver the procedure. For example, in addition to ensuring that patients knew when a colonoscopy was needed to screen for colon cancer, the Preventive Care Management Team would help the patient select a colonoscopy team (i.e., the Preventive Service Team) to perform the colonoscopy. The Preventive Service Team would receive a Procedure-

Based Bundled Payment for delivering the preventive service procedure.

An individual who had decided not to use a Preventive Care Management Team could still determine on their own that a particular preventive procedure was needed (e.g., a flu vaccination or a colonoscopy) and choose a Preventive Service Team to deliver that procedure.

Care and Payment for a Patient with New Symptoms

If a patient developed symptoms suggesting a possible new health problem, the patient would select a Diagnostic Coordinator to determine the cause of the symptoms and help the patient determine an appropriate treatment plan. In many cases, the same providers serving as the patient's Preventive Care Management Team (e.g., the patient's primary care practice) would also serve as the Diagnostic Coordinator, particularly for common symptoms, but in other cases, the patient would choose a specialist to play that role or the patient's primary care physician would refer them to a specialist who would serve as the Diagnostic Coordinator. For example, a patient who experiences chest pain while exercising could use a cardiologist as the Diagnostic Coordinator to determine whether the patient had heart disease and help the patient decide how it should be treated.

In emergencies, an Emergency Department physician would likely need to serve as the Diagnostic Coordinator. Some patients might also need or want to use an Emergency Department physician to diagnose symptoms that do not require emergency treatment simply because of the Emergency Department's ability to perform a wide range of tests or consult with multiple specialists during a single visit.

For common symptoms, the Diagnostic Coordinator would have a standard Diagnostic Team assembled for each symptom or combination of symptoms to carry out the necessary examinations and tests in order to determine a diagnosis, identify treatment options, and help the patient decide on a treatment plan. For example, a primary care practice might perform a laboratory test in the office to determine whether a patient had strep throat, whereas it would likely need a partnership with an imaging center to accurately diagnose the cause of a patient's hip pain. Each Diagnostic Team would receive a Diagnosis and Treatment Planning Payment that would cover all of the costs of examinations, testing, and imaging needed to determine a diagnosis for the specific symptoms. (The payment amount would differ for different symptoms and diagnoses.) The patient would not need to shop for and schedule tests and imaging studies on their own, hope those tests/studies were done in a high-quality way, and further hope that the results were all transmitted to the physician making a diagnosis; all of that would be handled by the Diagnostic Team. However, the patient could choose which Diagnostic Team to use based on what it charged for the Diagnosis and Treatment Planning Episode Payment.

For less common symptoms, the Diagnostic Coordinator would need to determine which other providers to involve based on the results of initial testing and additional providers might need to be tapped if the initial

diagnosis options are ruled out and other options need to be examined. For example, a primary care physician might need to contact several specialists to narrow down the potential diagnoses that would be consistent with all of the patient's symptoms; those specialists would help the PCP determine which tests should be ordered to further narrow the potential diagnoses, and then the PCP would send the patient to the specialist(s) who would be able to determine which diagnosis was appropriate. The Diagnostic Coordinator would be paid a Diagnosis Coordination and Treatment Planning Payment and the Coordinator would be accountable for coordinating all of these activities, but fees would need to be paid for the individual services because it would be impossible to predict in advance exactly which services would be needed to determine a diagnosis.

Care and Payment for a Patient with a Non-Emergency Acute Condition

When a patient who was otherwise healthy is diagnosed with a new acute condition that does not represent an emergency, and if that condition is relatively common and the patient does not have unique factors that would complicate the use of standard treatments, the patient would select an Acute Condition Treatment Team to deliver the care they need to resolve the condition. The patient would already have decided what kind of treatment they wanted through the treatment planning process that was supported by the Diagnosis and Treatment Planning payments, and the Diagnostic Coordinator could also assist the patient in choosing the best Acute Condition Treatment Team. The Acute Condition Treatment Team would receive an Acute Condition Episode Payment to provide the care; the amount of the payment would depend on the type and severity of the condition and on other characteristics of the patient that would affect the complexity of the treatment or the outcomes that could be achieved. In order to be paid for the care to an individual patient, the Acute Condition Treatment Team would be required to meet standards of quality in the delivery of care to the patient and to achieve pre-defined outcomes for the patient. If some Teams wanted to meet different outcome standards and charge different amounts for doing so, patients would have the freedom to choose them, but the patient might have to pay more to do so.

If the patient has an uncommon acute condition or risk factors, the patient would select an Acute Condition Treatment Coordinator who would assemble an appropriate Team to address the patient's needs. The Coordinator would be paid an Acute Condition Treatment Coordination Payment to ensure that all of the services that the patient receives are properly coordinated, and the individual providers would be paid for the services they deliver either through traditional fee-for-service payments or through bundled payments specific to the aspects of the patient's needs they address.

Care and Payment for a Patient with an Emergency Acute Condition

Most patients who develop a serious emergency condition would not be in a position to "shop" for the best provider but would likely receive care in the closest

hospital Emergency Department (ED), at least initially. That ED would already have received Standby Capacity Payments for each of the residents of the community, and those Payments would be covering a significant portion of the essential fixed costs of the ED and related services. As a result, when one of the residents actually required emergency treatment, the Acute Condition Episode Payment that was paid for their treatment would only need to cover the variable costs and a portion of the fixed costs associated with the treatment. If a visitor who did not live in the community needed emergency treatment, they would pay a higher amount designed to cover both the variable costs and a larger share of the fixed costs. In each case, the patient would know that the Acute Condition Treatment Team in the Emergency Department would only be paid for the full cost of the treatment delivered if that treatment met pre-defined quality standards and outcomes.

If the emergency condition is unusual or complex, a more customized approach would be needed, and the emergency physician, a hospitalist, or another appropriate physician would serve as the Acute Condition Treatment Coordinator and be paid to ensure that the patient received all of the care they needed from different providers in an effective way, but the individual providers would be paid fees for their individual services. For example, a patient who experiences multiple injuries during an accident might have multiple teams of surgeons and other specialists addressing separate subsets of the patient's injuries, but one physician would take responsibility for coordinating all of those activities.

Care and Payment for a Patient with a Chronic Condition

A patient who is diagnosed with a chronic condition would select a Chronic Care Management Team to deliver the necessary treatment and assistance needed to manage the condition. The patient would already have decided what kind of treatment they wanted through the treatment planning process that was supported by the Diagnosis and Treatment Planning payments, and the Diagnostic Coordinator could also assist the patient in choosing the best Chronic Care Management Team to deliver that treatment. If the patient has been newly diagnosed with the condition, the Chronic Care Management Team would receive a one-time or monthly Bundled Payment for a limited period of time (e.g., 3-6 months) to choose an appropriate treatment regimen and ensure that it was working well for the patient.

In some cases, the patient would continue using the same Chronic Care Management Team for ongoing care after this initial period, and in other cases, the patient might transition to a different Team after the initial period of treatment. For example, a patient with a unique or complex condition might receive initial treatment from a Team in another city that specializes in that condition, and then the patient would transition to a Team closer to home for ongoing management. Alternatively, a patient with an uncomplicated chronic condition might receive initial treatment from a Team led by a local specialist, but then their primary care physician would lead the Team taking responsibility for ongoing care.

The amount of the Bundled Payment would depend on the type and severity of the condition and it would also depend on characteristics of the patient that would affect the complexity of the treatment or the outcomes that could be achieved. In order to be paid for the care to an individual patient, the Chronic Care Management Team would be required to meet standards of quality in the delivery of care to the patient and achieve pre-defined outcomes for the patient. Payments would be higher for patients with characteristics that evidence has shown require more treatment in order to achieve outcomes. If some Teams wanted to meet different outcome standards and charge different amounts for doing so, patients would have the freedom to choose them.

Care and Payment for a Patient with Multiple Chronic Conditions

A patient who develops multiple chronic conditions might choose a single Chronic Care Management Team that specializes in coordinated management of all of the conditions, or the patient might choose separate Teams to manage subsets of their conditions. The choice could depend on the extent to which the conditions could be managed independently by separate teams and on the relative effectiveness of the single-condition teams vs. the combined-condition teams that are available in the patient's community. As noted earlier, some Teams might be unwilling to manage only the care of one condition if the patient has other conditions that must also be managed effectively to achieve good outcomes.

Care and Payment for High-Risk Patients

For many high-risk patients, no provider knows how to assure a good outcome for the patient, but the patient wants the opportunity to be treated in the hope of having a good outcome. Provider Teams would likely be unwilling to treat these patients if payment was contingent on a good outcome. To address this, patients with specific characteristics known to create a high risk of poor outcomes would be assigned to a different payment category than patients without those characteristics. If a provider Team treated a patient who was in the high-risk category, the provider's payment would be contingent on compliance with process standards in the delivery of treatment, but payment would *not* be contingent on achieving a good outcome. The patient would be explicitly told that good outcomes could not be assured so they could make an informed decision about whether to proceed with treatment. If other provider Teams were willing and able to commit to achieve good outcomes for high-risk patients, patients could choose to obtain their care from those Teams.

C. How Healthcare Providers Could Organize and Deliver Services Under Patient-Centered Payment

Healthcare providers could organize themselves in a variety of ways to deliver different combinations of these services and be paid for those services using one or more of the nine payment components. For example:

Primary Care Practice

A primary care practice could decide to offer some or all of the following types of services to patients and be paid for them accordingly:

- **Preventive Services Management.** The practice would receive a monthly Preventive Services Management Payment for each patient who selected the practice as its Preventive Care Management Team.
- **Selected Preventive Procedures.** The practice could deliver selected preventive procedures and receive a Procedure-Based Bundled Payment for patients who selected the practice to deliver those procedures. Other preventive procedures (e.g., colonoscopies) would be referred to other Preventive Service Teams.
- **Diagnosis and Treatment Planning.** The practice could offer to take responsibility for developing a diagnosis for a range of common symptoms and receive Diagnosis and Treatment Planning Episode Payments when it did. The practice could also agree to serve as a Diagnostic Coordinator for less common or more complex symptoms when multiple specialists might need to be consulted in order to determine an accurate diagnosis. However, the practice would also likely refer patients with less common or more complex symptoms to other Diagnostic Coordinators or Teams, such as an Emergency Department or specialty practices, knowing that those providers would have the experience and resources necessary to most efficiently and accurately determine the cause of the patient's symptoms and the options for treating them, while keeping the primary care practice informed and involved.
- **Treatment of Selected Acute Conditions.** The practice could provide treatment for selected non-emergency acute conditions and refer more serious or complex conditions to other Acute Condition Treatment Teams. For some patients, the practice might serve as the Acute Condition Treatment Coordinator but not actually deliver treatment, if the patient had characteristics where the primary care practice would be in the best position to coordinate services delivered by other providers.
- **Management of Selected Chronic Conditions.** The practice could provide management of certain types of chronic conditions, such as asthma, COPD, diabetes, and heart failure, for patients without factors that complicate their care, but refer patients with more serious or complex conditions to other Chronic Care Management Teams.

Overall, for each individual patient whose care is being managed by the primary care practice, the practice would receive two kinds of payments:

- Monthly payments to support general preventive services for the patient and ongoing management of any chronic diseases that the patient and practice had agreed the practice would manage. The amounts of the monthly payments would depend on the number and types of health risk factors and diagnosed chronic conditions the patient has. The amount of payment would also depend on whether the primary care practice met the quality standards and achieved the pre-defined outcomes for both preventive care and chronic disease management.
- A bundled "fee" for each procedure or treatment the practice performed on the patient to address a specific preventive need or acute condition. This payment would only be received if the practice met the quality standards and achieved the pre-defined outcomes for that procedure or treatment.

This structure has some similarities to the way primary care practices are being paid in many "primary care medical home" programs. For example, in the CMS Comprehensive Primary Care Plus (CPC+) demonstration, primary care practices receive a per-member-per-month payment for each patient that is stratified based on the number of chronic conditions and risk factors as measured by the patient's Hierarchical Condition Category (HCC) score, and the practice also receives fee-for-service payments for individual services it delivers to the patient. However, under CPC+, there is no predictability for the patient or CMS as to how many services the practice will use to treat a particular condition or what outcomes the practice will achieve, whereas under Patient-Centered Payment, the practice would receive bundled payments designed to cover the full set of services the patient needs for their particular health conditions.

Specialty Practice

A specialty practice could decide to offer some or all of the following types of services to patients and be paid for them accordingly:

- **Diagnosis and Treatment Planning.** The practice could take responsibility for developing a diagnosis for specific types of symptoms. The practice would recruit other essential providers to serve on Diagnostic Teams for those symptoms and accept Diagnosis and Treatment Planning Episode Payments to support the Teams' work. The practice could refer patients with more complex symptoms to other Diagnostic Teams.
- **Treatment of Selected Acute Conditions.** The practice could provide treatment for acute conditions that require its specialized expertise by forming Acute Condition Treatment Teams with other specialists, hospitals, post-acute care providers, etc. that would be needed to deliver the full range of services for treatment of the acute conditions.
- **Management of Selected Chronic Conditions.** The practice could provide treatment and care management for the specific types of chronic conditions re-

quiring its expertise, particularly those that are more serious or complex than primary care practices can typically manage. The practice could partner with other providers as necessary to form Chronic Care Management Teams that could deliver the full range of services that patients would need.

Community Hospital

A community hospital could decide to offer some or all of the following types of services to patients and be paid for them accordingly:

- **Emergency and Essential Services.** The hospital would receive a Standby Capacity Payment for each of the residents of the community to support the minimum fixed costs of services needed to provide emergency and other essential services such as an Emergency Department, surgery suite, cardiac catheterization program, etc.
- **Treatment of Selected Acute Conditions.** The hospital would form Acute Condition Treatment Teams with physicians and post-acute providers in order to deliver care for common acute conditions, particularly those that required inpatient care. If treatment of the acute condition utilized the hospital's emergency and essential services capacity, the payment amounts for the Acute Condition Episode Payments would only need to cover the hospital's variable costs and any portion of fixed costs not covered by the Standby Capacity Payments. Patients with acute conditions that required more specialized expertise or equipment than the hospital could provide would be referred to larger hospitals or hospitals that specialized in those conditions.
- **Diagnosis and Treatment Planning.** The hospital and its affiliated physicians could serve as a Diagnostic Team to diagnose a range of symptoms and it would receive Diagnosis and Treatment Planning Episode Payments when it did.

Health System or Accountable Care Organization

A health system or a group of providers that had organized as an Accountable Care Organization (ACO) could decide to offer any of the services described above for which the ACO had the necessary expertise and capacity. The ACO would be paid for each patient it cared for using the combination of Patient-Centered Payments that matched the needs which the ACO took responsibility for addressing. For example, if a patient only had a single acute condition, the ACO would only receive the corresponding one-time Acute Condition Episode Payment, whereas if the ACO helped the patient with multiple chronic conditions, the ACO would receive a monthly payment designed to support high quality care and a good outcome for all of those conditions.

D. How Purchasers Would Pay Providers Using Patient-Centered Payment

Under a Patient-Centered Payment system, a purchaser⁶⁹ would contract with each Team of providers that had organized itself to address one or more of the four types of patient needs that Patient-Centered Payments are intended to address. A Team of providers would function as a separate "narrow network" for addressing a particular type of patient need, and the purchaser and Team would agree that the Team would be paid for its services using the payment method applicable to that type of patient need. Although a single group of providers might decide to function as a Team for multiple types of patient needs, the group would still be paid separately for each type of need using the payment methodology applicable to that need, since purchasers and patients would be comparing the Team's cost and performance against other Teams in addressing each individual type of need. The purchaser and Team would agree in advance on how large the payment would be for addressing a particular type of need for patients with specific characteristics.

It would be up to each Team to decide how each of the individual providers on the Team – physicians, other clinicians, hospitals, skilled nursing facilities, home health agencies, etc. – would be paid for the specific services they provide, using the funds the Team received based on the agreed-upon payment amount for the patient need they addressed. Although the Team could use traditional fee-for-service payment methodologies to allocate the funds among the members of the Team if they wished, they would also have the flexibility to develop and utilize different methods of valuing the contributions made by individual members. (Section VIII describes in more detail how this transition could be made.)

Each Team would determine the price it would need to charge in order to meet the standards of quality and patient outcomes that patients and purchasers viewed as the minimum needed for payment. The purchaser would then determine whether it was willing to pay all or part of that price and what proportion of the price the patient would need to pay. If there were multiple Teams available to address a particular need in the community, the purchaser could contract with all of the Teams and allow the patient to choose which one to use, but the purchaser could also require the patient to pay any difference in price between the lowest-priced Team and the Team the patient chose to use. Each Team would also determine if it could commit to higher standards of quality or better patient outcomes for the needs it was addressing than the minimum levels of quality/outcomes required by the purchaser and if so, the Team could encourage patients to seek care from them instead of other Teams. (Since each Team would be addressing the same health condition and it would not be paid based on the number of services it delivered, this would not encourage higher volumes of services the way that current Tiered Network models can.)

E. How Patient-Centered Payments Solve the Problems With Fee-for-Service

1. Patient-Centered Payments would assure appropriate, high-quality care and good outcomes

Penalties for Inappropriate Use of Services

In contrast to fee-for-service payments, which are triggered by delivery of an individual *service*, most Patient-Centered Payments would be triggered by a specific health *condition*. The payment to the provider would not change if an unnecessary service or procedure is delivered. This creates an automatic penalty for delivering an unnecessary service since there would be no additional revenue to cover any incremental cost of that service. The exceptions would be for preventive services, where a condition of payment could be that the procedure was performed in accordance with preventive care guidelines, and rare or complex symptoms and acute conditions, where a customized approach to diagnosis or treatment was clearly needed.

Creating a Direct Link Between Payments and Quality/Outcomes

Under most of the categories of Patient-Centered Payments, a team of providers would receive a single bundled payment for all of the costs that are related to the condition that is being treated, including any complications the patient experiences as a result of the treatment they receive. As explained in Section V, bundled payments that include all costs related to a procedure create the equivalent of a warranty for any complications that occur, because if complications occur, the provider Team would need to treat the complications without receiving any additional payment. For example, an Acute Condition Episode Payment for a broken knee would cover not only the cost of the surgical repair for the knee but the cost of a hospital readmission needed to treat a surgical site infection. (The Acute Condition Team would be responsible for the cost of the readmission at whichever hospital treated the infection.) A Bundled Payment for Management of COPD would cover not only the cost of the medications needed to treat COPD and the staff time needed to help patients manage COPD, but it would also cover the cost of any Emergency Department visits and hospital admissions needed because of a failure to avoid exacerbations of the COPD or to intervene in less expensive ways when exacerbations occurred.

In addition, under Patient-Centered Payment, the patient would receive the equivalent of a money-back guarantee, i.e., the team of providers would only be paid if (1) the minimum care quality standards were met for the services they delivered to a patient and (2) the promised outcomes were achieved for the patient, unless the patient failed to follow through on actions that were included in the treatment plan. For example, the requirements for an Acute Condition Treatment Team to receive an Acute Condition Episode Payment for a

broken knee could be defined as (1) documentation that the Team followed an infection prevention protocol and used a knee implant meeting minimum quality standards and (2) documentation that the patient was able to walk after completing the prescribed post-surgical rehabilitation. If the patient refused to participate in the prescribed rehabilitation program, the Team's payment would only be contingent on meeting the standards for infection prevention and implant quality. If the outcome (ability to walk) could not reliably be achieved for patients with specific characteristics (e.g., obese patients), then a separate payment category with different outcome standards would be defined for patients with those characteristics, and payments for those patients would be contingent on the different outcome standards.

Paying nothing for failure to achieve a performance standard or outcome is not as draconian as it sounds:

- First, the performance standard or outcome would be defined as something that evidence showed a provider Team should be *able* to achieve for all or most patients who have the characteristics to which the payment applied. The patient would then have a realistic expectation as to what would be accomplished for them, the provider team would know they were accountable for accomplishing something that was feasible, and the provider team would also know exactly what they were accountable for so they could determine the cost of accomplishing it. If some patients had characteristics that consistently made it unlikely that the outcomes could be achieved, a separate payment category with different outcome standards would need to be established for those patients. If patients or purchasers were unwilling to pay adequately to cover the costs of achieving a particular performance standard or outcome, then the performance standard would need to be lowered. This is preferable to Pay-for-Performance systems that use small rewards and penalties based on measures of quality that providers fail to achieve for a large proportion of patients.
- Second, the amount of payment the provider Team would receive for the patients for whom the performance standard was achieved should be set at a level designed to cover all or part of the cost of the services to the patients for whom the standard was *not* achieved. This is no different than what a business in any other industry does when it provides a warranty or money-back guarantee on a product – the business charges a little more to the customers who *do* get the desired result in order to cover the cost incurred for delivering the product or service to the customers who *don't* get the desired result (and who therefore don't pay for the product or service even if they used it). However, just like a business offering a money-back guarantee, if a healthcare provider team is paid only when the outcome is achieved, it will have a strong incentive to achieve that outcome for as many patients as possible, because every success would increase the Team's profit margin and every failure would decrease it.

EXAMPLE 7: HOW OUTCOME-BASED PAYMENTS REWARD HIGHER VALUE CARE

Suppose the members of a surgery team (e.g., a surgeon, anesthesiologist, and hospital) currently are paid a total of \$20,000 for all of their services in delivering a surgical procedure and 10% of the patients currently fail to achieve the specified outcomes. Under standard fee-for-service payment, if the surgery team performs the procedure on 100 patients, the team would be paid a total of \$2,000,000, but 10 patients would pay \$20,000 without receiving the promised benefits. Under Patient-Centered Payment, the surgery team would be paid nothing for the patients who fail to achieve the specified outcomes, so they would need to charge more – \$22,222 per patient – to receive the same revenue as before.⁷⁰ If the surgery team performed the procedure on 100 patients, but only 90 achieved the outcome, they would continue to receive \$2,000,000 in revenue (\$22,222 x 90), but the 10 patients who received no benefit would pay nothing.

Under this approach, if the surgery team improved outcomes, patients would benefit and the members of the team would earn higher profits. For example, if the rate at which patients achieved the outcome increased from 90% to 99%, the surgery team would receive \$2,200,000 in revenue (\$22,222 x 99), a 10% increase, reflecting the 10% improvement in outcomes. If there was no significant change in costs associated with improving the outcomes, this could significantly increase the team's profit margin. Conversely, if the surgery team only achieved the desired outcome for 80% of patients, they would only receive \$1,777,778 in revenue, an 11% reduction. In contrast, under Fee-for-Service, the members of the surgery team would continue to receive the same amount of revenue regardless of whether their outcomes improved or worsened.

	CURRENT OUTCOMES		BETTER OUTCOMES		WORSE OUTCOMES	
	Fee for Service	Patient-Centered Payment	Fee for Service	Patient-Centered Payment	Fee for Service	Patient-Centered Payment
# of Surgery Patients	100	100	100	100	100	100
% with Good Outcomes	90%	90%	99%	99%	80%	80%
# with Good Outcomes	90	90	99	99	80	80
# with Poor Outcomes	10	10	1	1	20	20
Payments by Patients:						
for Good Outcomes	\$20,000	\$22,222	\$20,000	\$22,222	\$20,000	\$22,222
for Poor Outcomes	\$20,000	\$0	\$20,000	\$0	\$20,000	\$0
Revenues for Surgery	\$2,000,000	\$2,000,000	\$2,000,000	\$2,200,000	\$2,000,000	\$1,777,778
Change in Revenue			0%	+10%	0%	-11%

Would Care Be More or Less Expensive?

This approach might appear to make treatment less affordable for the patient or purchaser – in the example above, the patient or their insurance plan would have to pay \$22,222 for surgery rather than \$20,000. However, only *successful* treatment would be more expensive; ineffective treatment would be far *less* expensive. In the example, a patient or purchaser is expected to pay \$20,000 today even if the surgery does *not* achieve the goal, and there would be a 10% risk of such a failure occurring, whereas under Patient-Centered Payment, patients/purchasers who don't achieve the goal would pay *nothing*. Under Patient-Centered Payment, the extra \$2,222 paid when the surgery succeeds is the added cost of the warranty for a good outcome.

A warranty may also appear to be less affordable than a pay-for-performance system, but a pay-for-performance

system similarly requires the patient or purchaser to pay even when the desired outcome is not achieved. For example, assume that a pay-for-performance system paid a 1% bonus for each 1% improvement in the outcome rate. In the example, if the rate of successful outcomes increased from 90% to 99%, the surgery team would receive \$2,200,000 (\$20,000 x 100 + \$20,000 x 1% x 10% x 100), the same as under Patient-Centered Payment. However, under P4P, the one patient who still failed to achieve the outcome would have to pay \$22,000 for the procedure – 10% more than under Fee-for-Service – even though the procedure failed to do what the patient needed. In effect, under a P4P system, the patient with a bad outcome is being asked to not only pay for something that didn't work, but also to reward the provider for the results it achieves for *other* patients. In effect, the patients with good outcomes are being subsidized by the patients with bad outcomes.

The impact on a health insurance plan would depend on whether the P4P bonus was based on the overall outcomes for all purchasers or each individual purchaser. A purchaser with a small number of members could find that under P4P, a large portion of its payments were being spent on care that failed to achieve the desired outcome. In contrast, under Patient-Centered Payment, the purchaser would only pay for the care that met the desired outcome.

It is important to recognize that under a Patient-Centered Payment system, the provider Team is not “guaranteeing” that a particular outcome will be achieved or that there will be no errors or complications associated with treatment. Instead, the provider Team is merely saying that if the outcome is not achieved, the patient will not have to pay, and if there are errors or avoidable complications, they will be treated at no additional cost to the patient. Since the patient will know in advance what outcomes are expected and what the remedy will be for failure to achieve those outcomes, this could also reduce the number of medical malpractice lawsuits.

This kind of outcome-based payment approach is beginning to be used in healthcare. A number of pharmaceutical and medical device manufacturers have negotiated contracts with payers in which the manufacturer is only paid, or is only paid the full price, if the drug or device actually has the promised effect on the patient.⁷¹ In order to pay for implementation of the Diabetes Prevention Program (DPP), the Centers for Medicare and Medicaid Services has proposed only paying DPP providers for additional months of service to a patient if that patient maintains their weight loss during the period in which the services are delivered.⁷²

Encouraging Good Outcomes While Maintaining Access to Care for High-Risk Patients

It might appear as though not paying at all if desired outcomes are not achieved would create a significant disincentive for providers to treat higher-risk patients. However, as explained earlier, if there are specific types of patients for whom no provider knows how to predictably achieve a good outcome, those patients should be assigned to a different category, and in that category, payment would not be contingent on achieving the outcome. The patient could still choose to receive the treatment and know that it would meet all of the standards of quality in the delivery of treatment, but the patient would also understand in advance that there was a significant probability of poor outcomes. Unlike Pay-for-Performance and other value-based payment models that vary payments based on quality measures and outcomes, the provider would not be penalized for providing treatment to high-risk patients if the patient chose to be treated.

At the same time, there would be a disincentive for provider Teams to try and categorize every patient as “high-risk” in order to avoid accountability for outcomes. If a provider Team knows that it can achieve good outcomes for patients with some types of “high-risk” characteristics, then that Team could commit to achieving good outcomes for those patients even if other pro-

viders are not willing or able to do so. Patients with those characteristics would naturally prefer to select a Team that is willing to commit to outcomes, just as consumers in other industries are more likely to buy a product with a warranty instead of competitors’ products that come without a warranty. Once some Teams begin to commit to good outcomes for patients with specific characteristics, other Teams would likely conclude they could and should also make similar commitments. Once most provider Teams are making the commitment to better outcomes for patients with specific characteristics, those outcomes should become the standard for all Teams.

In some cases, rather than setting a lower outcome goal, a Team could decide to charge more for patients with characteristics that made them less likely to achieve a good outcome but only charge the patients who successfully achieved the outcome. In the example used earlier, if evidence showed that good outcomes could be achieved 95% of the time for normal weight patients but only 80% of the time for obese patients, the provider Team could charge \$21,050 for the normal weight patients and \$25,000 for the obese patients (assuming the obese patients wanted an equivalent money-back guarantee for the same outcome). The Team would then be rewarded for achieving better outcomes for each group of patients, but it would not be penalized for accepting a higher number of obese patients, because the higher payment would be specifically provided for obese patients.⁷³ However, if a provider charged more in order to achieve the better outcomes, the patient or purchaser would need to agree that the better outcomes were worth the price and that they were willing to pay the higher cost.

This approach allows much more effective patient choice than current public reporting programs. A patient would not be comparing providers based on their *past* outcomes for *other* patients who might have had very *different* characteristics; instead, the patient would be comparing providers based on what each provider is committing to achieve for *that specific patient* if the patient selects the provider for treatment.

This approach is also very different from typical Pay-for-Performance systems:

- Under P4P, if outcomes are measured at all, the same outcome measure is applied to all patients. Even if the measure is risk-adjusted, the provider generally still looks worse on the measure if they have high-risk patients who have poor outcomes. This is particularly problematic for small providers who have only a few high-risk patients, since random variation could make their performance look very good or very bad depending on the luck of the draw. Things would be different under Patient-Centered Payment, since the provider could be held accountable for certain measures for some categories of patients but not others.
- In a P4P system, even if a provider achieves good outcomes on average, a patient and their payer will still have to pay for care even if the outcome is not achieved for that individual patient. In contrast, under Patient-Centered Payment, there would be no

payment at all unless the pre-defined outcome is achieved.

A P4P system implicitly presumes that any cost differential associated with better outcomes is limited to the bonus or penalty amount that the provider can receive, so the provider may still be penalized for accepting patients for whom the cost of achieving a good outcome is higher than the amount of the potential P4P bonus. Under Patient-Centered Payment, the payment amount for a particular category of patients could be set at the level needed to enable achieving the outcomes that have been defined for that category of patients.

Partial/Interim Payments for Longer-Term Outcomes

In some cases, it will take months or even years to know whether a patient achieved all of the desired outcomes from a treatment. For example, although post-surgical infections will generally appear fairly soon after hip or knee surgery is completed, and a patient may be able to walk again in weeks, days, or even hours after the surgery is finished, it may take months before a person is able to perform all of the activities they want or need to participate in. Cancer patients want to survive for many years after treatment, not just for a few months.

However, most healthcare providers cannot wait for months or years in order to be paid for their services. This could be addressed by making a partial payment for treatment when short-term outcomes are achieved and an additional payment when a longer-term outcome is achieved, with the amount of the additional payment set so that it incorporates the interest lost or paid during the interim period.

A variation on this approach would be to distribute the additional payment for the longer-term outcome on an amortized basis each month in which that outcome is achieved, e.g., the Team would receive an additional payment for each month in which the patient is alive after treatment for a high-mortality illness. This is similar to an approach that Rolls Royce has successfully used in its jet aircraft business. Rather than charging a fixed price for an engine, an airline pays based on the number of hours of successful operation. The longer the engine functions without problems, and the sooner that it is returned to service when it does have a problem, the more money Rolls Royce makes.⁷⁴

Adjusting Payments When Patients Don't Adhere to Care Plans

In health care, many of the outcomes that patients and purchasers desire depend not just on what the healthcare providers do, but also on what the patient does. A physician can diagnose a symptom properly and prescribe a medication that will resolve it, but the symptom will not be resolved if the patient does not take the medication. Physicians, hospitals, and other providers often resist participation in alternative payment models that penalize them financially for low performance on quality measures when the reason for the poor performance was failure by the patient to adhere to the treatment plan. However, it is also clear that in many cases, there are things that providers can do to increase

patient adherence, such as taking the time to explain the importance of adherence, ensuring that patients have the resources and support needed to adhere, selecting treatment plans that are feasible for patients to follow, etc.

Patient-Centered Payments can address this issue in four different ways:

- **Giving Provider Teams the Resources and Flexibility to Overcome Barriers to Adherence.** One of the most common reasons why patients fail to adhere to a treatment plan is they cannot afford to do so. For example, a physician could prescribe the most effective and lowest-cost drug for treating a patient's condition, but if the patient doesn't have prescription drug insurance or the cost-sharing amount for the drug is too high, the patient may fail to fill the prescription and thereby fail to achieve the desired outcome. This could be addressed by giving Teams the ability to reduce a patient's cost-sharing if use of a medication or service would reduce the overall cost of treating the patient or achieving desirable outcomes.
- **Establishing Different Outcome Standards for Non-Adherent Patients.** Most product and service warranties in other industries come with limits and exclusions. For example, a product manufacturer's warranty will typically provide free repairs if the product is defective, but not if the customer damaged the product or used it in an unauthorized way. In a Patient-Centered Payment System, if a patient has failed to adhere to essential elements of a treatment plan even though there were no barriers to doing so (e.g., there were no costs to the patient of obtaining the treatment), the provider could be exempted from achieving one or more outcomes, but would still be accountable for having met quality standards that were within its control. These exemptions should be based on independently verifiable measures of non-adherence, such as failure to fill a prescription or to attend a rehabilitation session.
- **Creating Incentives for Patients to Adhere.** In some cases, rather than merely reducing or eliminating cost-sharing or other barriers to adherence, it may be desirable to give a patient a positive incentive for adherence. For example, the patient could be charged less for the overall treatment bundle if they adhere. This approach could also be used in order to have patients provide documentation of aspects of adherence that cannot be measured directly by the provider Team.
- **Including the Cost of Non-Adherent Patients in the Price of the Care.** No matter what a provider Team does to encourage adherence, there will likely be some patients who fail to adhere, and there may be no way to objectively document that. (For example, the fact that a patient fills a prescription does not guarantee that they actually used the medication.) In these cases, if the patient fails to achieve the desired outcome due to the lack of adherence, the provider Team should not charge for the care it delivered, and if a complication arose due to the lack of adherence, the provider Team should treat that complication at no additional charge. Most businesses that offer

money-back guarantees recognize that they will have to return money to some customers even though the failure of the product or service was the customer's fault.

Regardless of the mechanisms used to encourage adherence and avoid penalizing the provider Team inappropriately, the Team would need to clearly specify the actions that the patient would need to take in order for the Team to achieve the quality standards and desired outcomes. These actions would have to be specified prior to the initiation of treatment or management of the health condition the Team would be addressing, and the patient would need to agree that they would take those actions prior to the initiation of treatment with a full understanding of what would be involved, including all of the costs of the treatment. For example, if successful management of the condition would require that the patient take a specific medication on a regular schedule, the patient would need to be told how the medication would be obtained, what it would cost, and what side effects might be involved. The provider Team should assess whether there would be any financial or other barriers to adherence and modify the treatment plan to try and overcome those barriers before treatment begins. If the patient did not agree to adhere to the plan, then the Provider Team would not be accountable for the standards or outcomes that were dependent on the patient's actions. The provider Team would need to document that this information had been shared with the patient so that the patient knows that the Team believes the patient will experience less-than-ideal outcomes because of their inability or unwillingness to follow the agreed-upon treatment plan.

As noted above, even if a patient fails to adhere to the treatment plan, this does not mean that the provider Team would have no accountability at all for the care delivered. In all cases, there should be performance standards that are dependent solely on the Team's actions. For example, a surgeon would be accountable for avoiding errors and complications during surgery even if the patient failed to participate in the post-surgical rehabilitation program that was necessary to achieve the full set of desired outcomes of the surgery. For this reason, Patient-Centered Payments should have two different sets of measures – (1) “process” measures that would ensure a minimum quality of care for each patient, including those who do not adhere to key elements of the treatment plan, and (2) outcome measures that ensure outcomes are achieved for those patients who do adhere. Although the number of patients in the denominators of each of the measures would be smaller than if a single measure had been used for all patients, this should not be as much of a problem as it might appear because (1) there would be an expectation of 100% performance on the process measure regardless of whether one patient or a thousand were involved, and (2) the outcome measure would be a more reliable measure of Team performance because it would be based only on patients who were completing the actions the Team had indicated were needed to achieve good outcomes.

The process measures used in Patient-Centered Payment would represent steps that would need to be

carried out for each individual patient in order for the Team to be paid for each patient. This would be very different from current accreditation systems which look for documentation that a provider organization has performed the steps in the past or has policies requiring that the processes be followed. It would also be different from process measures in Pay-for-Performance systems where the provider is rewarded or penalized based on its average compliance with the process standards on a group of patients. Under Patient-Centered Payment, failure to deliver care in accordance with the applicable process standards for a patient would mean that the provider Team would not be paid at all for that patient.

This approach would focus performance measurement on things the provider Team can reasonably be expected to achieve, and it would avoid penalizing or rewarding the Team for factors that are outside its control.

Ensuring Adequate Payment When Better Outcomes Involve Higher Cost

The example used earlier implicitly assumes that it costs the Team the same amount to achieve a 99% success rate as it does to achieve a 90% success rate for patients with similar characteristics. While there are many examples of better outcomes being achieved simply by more careful and reliable delivery of the same services, there are also many situations in which additional services are needed to achieve a better outcome. Since not all outcomes involve health care services and spending, it is not always the case that the additional services will result in offsetting savings on other services. (For example, an additional service that enables a patient to return to work sooner would reduce lost productivity and income, but those benefits would not create any offsetting savings in healthcare spending.)

If higher costs are required for better outcomes, purchasers and patients would need to pay more if they want to obtain the better results. For example, assume that a hospital and surgeon Team find that if they spend \$3,000 more per patient (a total of \$23,000 per patient instead of \$20,000) the patient will recover two weeks more quickly. That Team could charge \$23,000 and show that they can achieve a faster recovery at that price, while other surgery Teams could continue to offer the procedure for \$20,000 but make it clear to their patients that they would need to expect a longer recovery time. In both cases, under Patient-Centered Payment, the patient who failed to recover within the specified window of time would pay nothing, but the patient who chose the lower-priced hospital and surgeon Team would understand that they would have a slower recovery time. Purchasers and patients could decide whether they wanted to spend the extra \$3,000 to get the procedure from the provider Team that offers the faster recovery time. (If the patient's employer was paying more than \$37.50 per hour for a substitute worker to fill in while the patient was recuperating, the employer could save money by paying the extra \$3,000 to achieve a faster recovery.)

This approach reflects the reality that the “value” of the procedure will differ from patient to patient and purchaser to purchaser. For example, an employer may place a

high value on the ability of the employee to return to work quickly and be willing to pay more if additional healthcare services could achieve that. Retired individuals may decide that a slower recovery is worth the savings from the lower-cost combination of services.

Allowing the Market to Determine Value

In communities where there are multiple Teams of providers that offer the procedure, this approach allows competition to determine what outcomes are achievable at what cost. If patients and purchasers can choose provider Teams based on both price and outcomes, a provider Team would have an incentive to deliver better outcomes than other provider Teams, at the same or lower price as other provider Teams charge, in order to attract patients away from other Teams. If it did cost more to achieve better outcomes, and if a provider Team felt that patients or purchasers placed a higher value on the better outcomes, it could charge more to achieve the better outcomes, but it would have an incentive to keep the price increase as low as possible to avoid having other provider Teams charge less for similar outcomes. This is the same way markets work in every other industry.

Not every patient has to be making choices based on this rational evaluation of differences in value across provider Teams in order to create an incentive for the Teams in a community to deliver the best outcomes at the lowest cost. As explained in Section II, because of the generally high fixed costs associated with the delivery of healthcare services, a provider's profit under fee-for-service will increase or decrease significantly with relatively small increases or decreases in the number of services they deliver. Under Patient-Centered Payments, payments are based on patients, not services, so if even a small percentage of patients choose a different Team, there could be a significant impact on the profits of the providers in the Team, so Teams will need to find ways to attract and retain patients, rather than finding ways to deliver more services to the same patients.

Encouraging Competition in Small and Consolidated Markets

In communities where there is only one provider Team that delivers care for a particular type of health problem (e.g., there is only one hospital and/or one physician or physician group who deliver one or more essential services needed to treat or manage that problem), market forces can still help promote higher value, but in a slower and less direct way:

- For acute conditions that are relatively expensive to treat, if the provider team in the local community offers care that costs significantly more or has significantly lower quality than providers in other communities, patients may find it worthwhile to travel to another city for care, and their employers or health insurance plans might find it cost-effective to pay for the costs of their travel. In effect, the "market" for care then includes the providers in the local community and providers in other communities, with the "true" price of the latter adjusted to incorporate travel costs.

- For conditions where it is not feasible for the patient to travel for care, the differential in price between what local providers are charging and what higher-value providers could charge could induce competitors to enter the local market.

It is important to recognize that in small and rural communities, there may not be enough patients to support more than one provider, and if the sole provider of care for a particular condition charges more for its services than providers in larger communities, that may be a reflection of the high fixed cost of the service, rather than an indication that the local provider is behaving as a monopolist and charging high prices. For some types of services, it may make sense for everyone in the community to travel to a different city in order to receive care simply because providers who deliver higher volumes of services will have higher quality as well as lower cost. In most cases, though, services will need to be delivered locally, and residents of rural communities and the purchasers who insure them may have to pay more for an Acute Condition Episode Payment or Bundled Payment for Management of a Chronic Condition simply because it will cost more for any provider to deliver the key services in those communities. In these cases, provider Teams should provide purchasers and patients with an analysis demonstrating that the cost of care is high because of the number of patients who need care relative to the minimum level of fixed costs required to deliver the services, rather than because the provider Team is charging a high markup over costs.

Creating Reserve Funds So Patient-Centered Payments Are Feasible for Small Providers

Participation in the outcome-based approach under Patient-Centered Payment will require that provider Teams have some reserve funds to manage the inherent statistical variability in outcomes. This will be particularly important for smaller providers and for providers who treat many different kinds of patient conditions if there are only a small number of patients who have each condition.

For example, assume that effective Teams can achieve a particular outcome for patients with a specific health condition and other characteristics in 95% of cases. Under Patient-Centered Payments, a Team would only be paid when the outcome is achieved, so the payment amounts for successful cases would need to be at least 5% higher than the cost of treatment so that the revenues received for the 95 cases that were successful would cover the costs of the services for all 100 patients who were treated.

However, if a Provider Team only treats a small number of patients with the health condition during the year, then revenues and costs will be more volatile from year to year. If the Team only treats 10 patients with the health condition each year, then over the course of ten years, the Team will treat 100 patients and for 95 (95%), the treatment will be successful. But in any of the years in which a case is unsuccessful, the one patient whose treatment was unsuccessful will represent 10% of the 10 patients treated, which is twice as many as the 5% assumed in setting the price. If the provider Team re-

ceives payments equal to 105% of the costs for 9 successfully-treated patients and no payment for the unsuccessful case, the Team's total revenue will only equal 95% of the costs of the 10 patients treated (105% x 90%), causing a 5% operating loss in that year. In other years, the Team will have no unsuccessful cases, and revenues in those years will be 105% of costs (105% x 100%). On average over the ten years, the revenues will cover the costs, but in any given year, the Team will either have a 5% profit or a 5% loss.

In addition, even after stratifying patients based on characteristics known to affect outcomes, there will be random variation among patients, such that if good performance is achieved on average, the actual performance level in any given year may be higher or lower than that. A provider with an average success rate of 95% may, in any given year, have a 90% or 99% success rate simply due to random variation in patient characteristics.

The solution to this is for the provider Team to have a reserve fund with sufficient money to cover the year-to-year variation in revenues.⁷⁵ If the Team expects a 95% success rate and increases the price of care by 5% over costs to cover the failures, then the Team would need to set aside the 5% surplus in the years in which there are no failures so that money from the reserves can be drawn down in the years when there are failures to cover the unpaid costs. The positive financial margin generated because the success rate in a year is higher than 95% should not be treated as a "profit," but rather a planned contribution to the reserve in order to offset the negative financial margin generated in years when the success rate is lower than 95%.⁷⁶ Health insurance plans maintain reserves for essentially the same reason – insurance premiums based on average healthcare spending will be below the actual level of spending in some years and higher than actual spending in other years.

Once a provider Team has an adequate reserve fund, it simply needs to maintain it. The challenge for a provider Team will be to build up this reserve fund before beginning the delivery of care. The smaller the providers in the Team, the more important this will be and the more challenging it will be, so a mechanism is needed to initially capitalize this reserve fund for smaller provider Teams. One obvious source for these funds is the reserves that health insurance plans have already built up. Those reserves were intended to ensure the health insurance plan had sufficient resources to pay claims in years when claims are higher than premiums, and the health plans built those reserves by charging health plan members or plan sponsors higher premiums than were actually needed to pay for the cost of services in the year the premium was collected. If healthcare provider Teams are now going to assume a portion of that risk under Patient-Centered Payments, there will be a lower risk that the claims to the health insurance plan will exceed its premiums, and therefore the health insurance plan will no longer need the level of reserves it has maintained in the past, whereas the provider Teams will need reserves that they have not needed in the past.

Obviously, in addition to the amount set aside for reserves, a provider Team would want to plan for a positive profit margin when it achieves the planned success rate. That would truly be profit and it would not need to be placed into the reserve. If an even higher margin is achieved due to better outcomes or operating efficiencies, that would also be treated as profit, and that profit encourages provider Teams to achieve better outcomes at lower prices when it is feasible to do so.

Factoring in the Cost of Reporting on Performance Measures

Finally, it is important to recognize that collecting and disseminating the information about quality and outcomes that will be needed to support an effective healthcare marketplace will also have a cost. Consumers and purchasers would obviously prefer to have very detailed information about all aspects of quality and outcomes before choosing a particular Team, but there will be costs involved in provider Teams collecting and reporting additional measures and there will be costs involved in purchasers or other third parties verifying the information in these reports. Before proposing a new quality or outcome measure, an estimate should be prepared as to how much it will cost for providers to report their performance on the measure and for other parties to verify this information. If patients and purchasers are not willing to pay prices that are high enough to cover both the cost of the services needed to achieve a high outcome and the cost of measuring and reporting on the outcome, then the outcome measure should not be used.

2. Patient-Centered Payments would match the cost of high-quality, appropriate care

In most cases, Patient-Centered Payments would be based on the specific health problems the patient is experiencing and the patient's risk factors, not on whether a particular service or procedure was delivered. For emergency services and certain other services in small communities where a part of the "service" is the provider's ability to respond quickly within the community, the payments would not even be based on the number of patients served, but on the number of individuals who might need services. In all cases, however, Patient-Centered Payments would only be paid if high-quality care was delivered and if the intended outcomes were achieved. These features enable Patient-Centered Payments to eliminate or significantly reduce the reasons described in Section II as to why traditional Fee-for-Service payments do not match providers' costs of delivering good care:

- **Patient-Centered Payments for acute conditions would be more aligned with the way that providers incur costs in delivering acute care than traditional Fee-for-Service payments or typical Procedure-Based Episode Payments.** A provider Team would receive an Acute Condition Episode Payment for achieving a good outcome in treating the condition, not based on how many or what kinds of services or procedures were used, so delivering more services or procedures to the same number of patients would not result in higher profits and delivering fewer services or procedures to

EXAMPLE 8: HOW STANDBY CAPACITY PAYMENTS WOULD MATCH PAYMENTS TO COST

Assume that a community with 10,000 residents has a single community hospital with an emergency department (ED). As shown in Figure 4a, the residents make a total of 3,000 visits per year to the ED and the hospital is paid an average of \$850 per visit. The Emergency Department costs \$2,575,000 per year to operate. 80% of the cost is fixed – the hospital incurs these costs whether it has any visits or not. With the current number of visits at current payment rates, the ED generates \$2,700,000 in revenue, creating a 5% profit margin for the hospital.

FIGURE 4a

	CURRENT VISITS - FFS		
	\$/Visit	Visits	Total \$
ED Revenues			
Per Visit	\$900	3,000	\$2,700,000
ED Costs			
Fixed Costs (80%)			\$2,059,000
Variable Costs (15%)	\$172	3,000	\$516,000
Total Costs			\$2,575,000
ED Margin (5%)			\$125,000

Figure 4b shows that a 10% reduction in the number of ED visits would cause the ED to lose money, because the cost would only decrease by 2%, but revenues would decrease by 10%. Conversely, as shown in Figure 4c, a 10% increase in the number of ED visits would be highly profitable for the hospital because the cost of operating the ED would only increase by 2%, but revenues would increase by 10%. As a result, the hospital is financially harmed if better patient care reduces ED visits, and the hospital has a strong financial incentive to encourage greater use of the ED for non-emergency needs.

FIGURE 4b

	CURRENT VISITS - FFS			REDUCTION IN VISITS – FFS			% Change
	\$/Visit	Visits	Total \$	\$/Visit	Visits	Total \$	
ED Revenues							
Per Visit	\$900	3,000	\$2,700,000	\$900	2,700	\$2,430,000	-10%
ED Costs							
Fixed Costs			\$2,059,000			\$2,059,000	
Variable Costs	\$172	3,000	\$516,000	\$172	2,700	\$464,400	
Total Costs			\$2,575,000			\$2,523,000	-2%
ED Margin			\$125,000			(\$93,400)	-175%

FIGURE 4c

	CURRENT VISITS - FFS			INCREASE IN VISITS – FFS			% Change
	\$/Visit	Visits	Total \$	\$/Visit	Visits	Total \$	
ED Revenues							
Per Visit	\$900	3,000	\$2,700,000	\$900	3,300	\$2,970,000	+10%
ED Costs							
Fixed Costs			\$2,059,000			\$2,059,000	
Variable Costs	\$172	3,000	\$516,000	\$172	3,300	\$567,600	
Total Costs			\$2,575,000			\$2,626,600	-2%
ED Margin			\$125,000			\$343,400	+175%

EXAMPLE 8 (continued)

Figure 4d shows how the ED could be paid under a Patient-Centered Payment system. The insurance plan for each resident would make a fixed annual Standby Capacity Payment to the hospital of \$216 for that resident. If a resident came to the ED for diagnosis or treatment, the insurance plan would make an additional episode payment averaging \$180. (The actual payment would depend on the specific symptoms being diagnosed or the specific condition that was being treated.) If better chronic disease care or use of primary care for diagnosis and treatment of minor problems led to a 10% reduction in the number of ED visits, the hospital's revenues would only decrease by 2%, matching the 2% decrease in costs.

FIGURE 4d

	PATIENT-CENTERED PAYMENT			REDUCTION IN VISITS			% Change
	\$/Unit	Patients/ Visits	Total \$	\$/Unit	Patients/ Visits	Total \$	
ED Revenues							
Standby Capacity (Per Resident)	\$216	10,000	\$2,160,000	\$216	10,000	\$2,160,000	0%
Diagnosis/Treatment (Per Episode)	\$180	3,000	\$540,000	\$180	2,700	\$486,000	-10%
Total Revenues			\$2,700,000			\$2,646,000	-2%
ED Costs							
Fixed Costs			\$2,059,000			\$2,059,000	
Variable Costs	\$172	3,000	\$516,000	\$172	2,700	\$464,400	
Total Costs			\$2,575,000			\$2,523,000	-2%
ED Margin			\$125,000			\$122,600	-2%

As shown in Figure 4e, if the hospital had a 10% increase in the number of visits, its revenues would only increase by 2%, matching the 2% increase in its costs. As a result, under the Patient-Centered Payment system, the hospital would no longer have a financial incentive to increase ED visits, and it would no longer be financially penalized by efforts to reduce ED visits.

FIGURE 4e

	PATIENT-CENTERED PAYMENT			INCREASE IN VISITS			% Change
	\$/Unit	Patients/ Visits	Total \$	\$/Unit	Patients/ Visits	Total \$	
ED Revenues							
Standby Capacity (Per Resident)	\$216	10,000	\$2,160,000	\$216	10,000	\$2,160,000	0%
Diagnosis/Treatment (Per Episode)	\$180	3,000	\$540,000	\$180	3,300	\$594,000	+10%
Total Revenues			\$2,700,000			\$2,754,000	+2%
ED Costs							
Fixed Costs			\$2,059,000			\$2,059,000	
Variable Costs	\$172	3,000	\$516,000	\$172	2,700	\$567,600	
Total Costs			\$2,575,000			\$2,626,600	+2%
ED Margin			\$125,000			\$127,400	+2%

those patients would not result in losses, in contrast to payments under Fee-for-Service or Procedure-Based Episode Payments. Moreover, the Emergency Services and Standby Capacity Payments would be explicitly designed to cover most or all of the fixed costs of essential acute care personnel, facilities, and equipment in a community that must be paid for regardless of whether any patients need the actual services or not. Paying directly and separately for those fixed costs enables the Acute Condition Episode Payments to more closely match the additional marginal costs provider Teams incur in treating each additional patient with an acute condition.

- **Patient-Centered Payments for chronic conditions would be more aligned with the way that providers incur costs in delivering care for chronic conditions than traditional Fee-for-Service payments.** Patients with chronic conditions typically require regular assistance from staff such as nurses, educators, community workers, etc. Regardless of how the provider organization is paid by payers, these personnel are typically paid a salary (or an hourly rate with regular hours), rather than being paid for how many individual services they deliver. Their productivity should be assessed based on how many patients they manage, the needs of those patients, and the outcomes they can achieve for the patients, not based on how many services they deliver. Consequently, a risk-adjusted monthly payment per patient will better align with the way a chronic care provider organization will incur personnel costs than will the Fee-for-Service payment system that is tied to office visits with physicians or to other specific activities. In addition to the costs of personnel who care for the patients, patients with chronic conditions also typically require some type of regular medication or other therapy to control the symptoms of the chronic condition and to slow its progression, and patients with more severe conditions will typically require more medications or more expensive medications than others, so predictable monthly payments would also be aligned with predictable monthly medication costs; higher payments for more severe conditions would provide more resources for the patients who are more likely to need more expensive medications. (How Patient-Centered Payments would deal with the unpredictable aspects of medication costs is discussed further below.)
- **Patient-Centered Payments for preventive services would be more aligned with the way that providers incur costs in delivering preventive care than traditional fee-for-service payments.** Similar to chronic care management, proactive preventive care requires regular involvement of staff who are paid a salary or an hourly rate with regular hours and who can manage a certain number of patients who have particular risk factors, so the costs incurred by the Preventive Care Management Team will depend on the number of patients and the complexity/severity of their needs.
- **Payment amounts could be based on the cost of delivering appropriate, high-quality care.** Since the revenues that preventive care, acute care, and chronic care provider Teams receive under Patient-Centered Payments would be based on their patients'

needs, not on the specific services the members of the Teams delivered, there would be no financial incentive to deliver unnecessary services and procedures as there is under traditional Fee-for-Service and under Procedure-Based Episode Payments. As a result, data on the actual costs providers incur in care delivery would more accurately reflect the true average cost of delivering appropriate services. Similarly, because Patient-Centered Payments would only be paid when high-quality care was delivered, data on the actual costs of care would more accurately reflect the true cost of high-quality care.

Paying for Standby Costs and Essential Community Capacity

Communities expect their hospitals to have service lines such as the Emergency Department, cardiac catheterization, surgery, labor & delivery, etc. equipped, staffed, and ready to deliver services on a round-the-clock basis, regardless of whether any patients actually need them. But hospitals are not paid directly to maintain this “standby” capacity; they are only paid when a patient actually has an accident, a heart attack, or a baby ready to be born.

There are significant fixed costs associated with maintaining this standby capacity, which translates into a high average cost for each service that is delivered. The average cost is particularly high in small and rural communities where the volume of services is lower but the same fixed costs are required, and it is also high in hospitals that offer highly specialized standby services, such as neonatal intensive care units.

In order to cover these high average costs, hospitals charge high fees when services are actually delivered. However, as explained in more detail in Section II, even if these fees are exactly enough to cover the average cost of the services at current levels of services, they are either too high or too low when the volume of services changes. For example, an increase in the number of patients visiting the Emergency Department is very profitable for the hospital, because the marginal cost to the hospital of treating an additional patient is small, but the charge for the visit is very high. Conversely, an effort to reduce ED visits would have serious negative consequences for the hospital, because the hospital's fixed costs would stay the same even if the number of visits decreased, but the revenues the hospital received would decrease significantly if the number of visits decreased.

The Standby Payment component of Patient-Centered Payment would directly address this problem. Instead of being paid solely based on how many patients visited the ED or used other standby services, the hospital would receive the majority of its revenue for the standby services based on the number of *residents* of the community, not based on the number of *services delivered*. The hospital would still be paid for each standby service that it delivered, but the payment for an individual service would be based on the marginal/variable cost of the service (e.g., the cost of drugs and supplies used during an ED visit). Under this approach, the hospital's revenues would increase when it had more ED visits or delivered other standby services, but the revenue would

only increase by the amount that the hospital's cost increased. If the hospital had fewer ED visits or other services, the hospital's per-service revenues would decrease, but the per-resident payments would not change and would continue to cover the hospital's fixed costs.

In a community with one hospital, each resident's health insurance plan would pay the hospital a fixed amount each month determined by dividing (a) the minimum fixed cost of maintaining the hospital's standby services by (b) the total number of insured residents living in the community. In a community with multiple hospitals, the health insurance plan would still make the same per resident payment in total, but that payment would be divided among the hospitals in proportion to the services they actually delivered.

In rural communities, there could be providers other than hospitals that should receive similar Standby Capacity Payments. For example, if there is only one primary care clinic in the community, and if there are fewer residents in the community than would normally be needed to sustain such a clinic, the clinic could receive a per-resident Standby Capacity Payment to ensure it had sufficient resources to cover its core fixed costs. The clinic would also be paid a Bundled Payment for each patient whose chronic disease care it managed or who had an acute condition that required treatment; the amount of those payments could be the same as at clinics in larger communities because the higher fixed costs per patients were already being covered by the per-resident Standby Capacity Payment.

Ensuring Payment Amounts Are Adequate for Individual Patients

Although the structure of Patient-Centered Payments would better match the way providers incur costs in delivering high-quality care and would avoid creating financial incentives to deliver unnecessary services, the amount of payment would not necessarily match the actual costs of delivering care to any individual patient. The payment rates would be set to match the average costs of patients with a particular combination of health conditions, risk factors, and other characteristics that affect what it will cost to address their needs. However, the needs and appropriate services for individual patients will differ from that average, and so the time and costs a provider incurs to deliver care to any individual patient will differ from the payment received for that payment.

This is also true of Fee-for-Service payment. Even if a fee is based on an estimate of what it will cost the provider to deliver the service to patients on average, a provider may need to devote more time or resources to delivering a service to some patients than others, but the fee amount will be the same. For example, even though some patients will have characteristics that can be predicted to require more time during an office visit or a surgery than others, in general, the fee for the office visit or surgery will be the same regardless of whether the patient has these characteristics.⁷⁷

However, because Patient-Centered Payments would cover a *bundle* of services, there would be variability in

terms of the *number* of services needed for patients as well as the costs of delivering *individual* services. This means that in any category of patients for which there was a single Patient-Centered Payment, there would inherently be more variability from patient to patient in the time and costs providers would incur relative to their payments than under Fee-for-Service.

Section V described the problems for both patients and providers that this variability can cause under population-based payments. There is a risk that patients who have greater needs will not receive all of the services they need, and there is a risk that provider Teams that care for patients with greater needs will incur significant financial losses. Patient-Centered Payments would prevent these problems in the following way:

1. If there are a large number of patients with specific characteristics for whom provider Teams frequently and predictably incur higher out-of-pocket costs, then a separate category of payment should be defined for patients with those characteristics (or a category that does have the appropriate payment amount should be expanded to also include patients with those characteristics).
2. If there are infrequent or unpredictable costs that are relatively small in magnitude relative to the overall revenues the provider Team receives, or if there is only a small number of patients with the relevant characteristics, the payment for each patient in the category would be increased by a small amount to enable the provider Team to create a reserve or to purchase reinsurance sufficient to cover the higher costs for the unusually expensive patients. These reserves could be established and maintained in the same way described earlier to address the variability in outcomes. A provider team would need to commit to serving all patients with the relevant characteristics in order to receive this higher payment.
3. For infrequent and unpredictable costs that are large in size, the provider Team would need to charge the patient and their purchaser extra for these costs. The situations that would trigger these "outlier" payments would need to be identified explicitly, so that it was clear that there would only be an additional charge beyond the standard payment for specific types of costs in specific circumstances. These exceptional cases and the outlier payments associated with them would be the equivalent of the limits in limited warranties for other types of products and services.

Provider Teams with small volumes of patients would likely need to use the third approach more often than the second approach simply because they would not have a high enough volume of patients with the condition for which the payments were being made to generate an adequate reserve or pay for reinsurance without significantly distorting the price for other patients.

It is important to recognize that there would not be a higher Patient-Centered Payment or outlier payment simply because provider Teams had to deliver one particular service more often; there would need to be evidence that the provider Team's *total* costs for treating

patients with a particular condition were higher. There are two reasons for this:

- As noted in Section II, most of the costs for delivering most healthcare services are fixed costs, and the costs will not change even if more services are needed or more time is needed to deliver those services. In the example in Section II, the hospital's cost of staffing the Emergency Department is the same whether it has two patient visits during the entire day or two patient visits every hour. If one of those patients requires more of the ED physician's time during the visit than other patients do, a cost-accounting system might assign a higher "cost" to that patient's visit because of the higher time, but the hospital would not have to *spend* more because the visit was longer, and any "loss" assigned to the longer visit by a cost accountant would be offset by higher margins assigned to the other visits.⁷⁸ However, if a provider Team had reached its maximum capacity for treating patients, the additional time needed for one patient might mean that one or more other patients could not be treated or that additional personnel would need to be paid to treat them. For example, if a surgery team was performing surgeries at maximum capacity and more time spent on one patient's surgery meant that the team would be unable to perform as many surgeries on other patients as it had planned, even though the costs of the surgery team would not change, the team's revenue would decrease because the number of payments would decrease. Consequently, the need to adjust the payment will depend not only the additional time or resources involved for patients with particular characteristics, but the frequency with which a provider will be caring for that type of patient.
- In some cases, the costs of an additional or more expensive service needed by a particular type of patient will be offset by lower spending on other services for that type of patient. For example, if prescribing a more expensive medication would reduce the patient's need for other types of services, then the need to adjust the payment will depend on the net change in total costs, not just the change in costs for medications.

Properly Separating Insurance Risk and Performance Risk

The combination of (a) a payment structure designed to align with the way providers incur costs, (b) stratification of payments amounts based on patient characteristics known to affect resources and outcomes, and (c) adjustments to payment amounts for unusual out-of-pocket costs provides a rational and appropriate way for purchasers and provider teams to share risk in healthcare payment.⁷⁹

- Purchasers would be responsible for *insurance risk*, i.e., whether the patient had an acute or chronic condition, whether the patient had other characteristics that would make it more expensive to treat that condition and/or to achieve good outcomes, and whether circumstances outside the control of the

provider Team had occurred that increased the Team's out-of-pocket expenses.

- Provider Teams would be responsible for *performance risk*, i.e., how to achieve the desired outcomes for the patient using a predefined amount of funds that would be expected to be sufficient to cover the costs of high-quality care.

3. Patient-Centered Payment would give providers the flexibility to deliver the highest-value services

Patient-Centered Payments would tie payments to the results that a Team of providers achieved for one or more specific health conditions, not to the specific services that the providers deliver. Consequently, instead of being limited to delivering the narrowly defined services that are eligible for payment under Fee-for-Service, the provider Team would have the flexibility to use whatever type of service achieved the desired results. Instead of the *purchaser* making decisions as to which specific services deserved payment and which did not, as is typical in current health insurance benefit designs, the provider Team would make that decision with respect to individual patients, and the provider Team would accept accountability for overall costs and outcomes.

In Fee-for-Service payment, a purchaser might decide not to pay for a specific service because the improvement in outcomes it achieves do not justify its cost when averaged over all patients who might receive the service, particularly if there is a concern that providers would use the service for patients who don't really need the service. However, this penalizes the subset of patients who could benefit from the service. Under Patient-Centered Payment, the provider Team could decide whether a service would result in sufficiently better outcomes when it is used for specific types of patients, and the purchaser would not need to be concerned about overuse of the service because the provider team would not receive extra revenues simply because it delivered the additional service.

4. Patient-Centered Payments would enable patients and purchasers to predict the total cost of care for specific health problems and compare provider Teams on cost and quality

For common types of patient symptoms, conditions, characteristics, Patient-Centered Payments would enable each patient and their purchaser to know in advance the full amount they would have to pay a provider Team for diagnosis of a symptom, for treatment or management of a diagnosed acute or chronic condition, for delivery of preventive care, and for maintenance of emergency service capacity in the community. The amount paid to a Team for two patients with the same health problem would be the same unless the patients differed in terms of specific characteristics known to affect the cost of care for their symptom or condition. This would enable each patient (or their purchaser) to compare the amounts that different

providers would be paid for treating that patient's health problems.

For uncommon symptoms, conditions, and characteristics, provider Teams would be paid using either Diagnosis Coordination and Treatment Planning Payments and/or Acute Condition Coordinated Treatment Payments plus fees for individual services, and the patient and purchaser would *not* know in advance the exact amount they would have to pay. However, that would be because, by definition, the services and costs associated with those patients are *not predictable* by either providers or purchasers. If the services and costs are truly unpredictable, then that spending should be treated as *insurance risk* that is managed by the patient's health insurer, not performance risk that a provider Team should be expected to accept. If, in the future, the services and costs became predictable for patients with particular characteristics who had a specific condition, a Diagnosis and Treatment Planning Episode Payment and/or Acute Condition Episode Payment could then be defined for that symptom or condition, and fewer patients would then be covered by the other payments.

In addition, costs that cannot reasonably be controlled by a provider Team should be paid for separately by the patient or purchaser. For example, if a particular drug is the only available treatment for a patient's condition, and if the manufacturer of that drug increases its price, the total amount that will need to be spent for the patient's care will increase, and neither the physician who is prescribing the drug nor any other member of the provider Team can do anything to avoid that increase. Consequently, the higher spending due to the price increase would be paid for separately from the Bundled Payment for the patient's care, and either the patient or the patient's health insurance plan would have to be responsible for that higher amount of spending as part of the insurance risk for the patient. However, if there are choices of treatments available with equivalent efficacy, such that the provider Team could use a lower-cost treatment when the price of the drug increases, the provider Team should remain accountable for the total spending on the patient's treatment.

In no case would the patient or purchaser know in advance the total amount that would be spent on *all* aspects of the patient's care during the year, but that is simply because no one would know exactly what new health problems the patient might develop during the year.⁸⁰ A primary reason for purchasing health insurance is to ensure funds are available when unpredictable medical problems arise, and so the portion of the total cost of care that is driven by the types of health problems a patient has should be considered as insurance risk that is managed by the purchaser, not by any provider Team. The failure to make this separation of insurance risk and performance risk is a major weakness with population-based payment. Although a full population-based payment system (i.e., global capitation) would be more predictable for the *purchaser*, it could result in undertreatment of *patients* and/or unmanageable financial risk for *providers*.

F. How Patient-Centered Payments Preserve the Strengths of Fee-For-Service

In addition to addressing each of the major problems with Fee-for-Service payment, Patient-Centered Payment would preserve most of the strengths of Fee-for-Service that has led to its continuing widespread use.

5. Providers would only receive Patient-Centered Payments when patients receive help

As discussed in Section II, a key strength of Fee-for-Service payment is that a provider is only paid when a patient receives some kind of help (in the form of the services that are paid for), whereas under capitation and other "population-based payment" systems, a provider could receive a payment for an individual patient even if that patient received no help at all.

However, the help the patient receives under traditional Fee-for-Service payment may or may not meet quality standards or address the patient's need. Typical Pay-for-Performance programs provide no assurance that an individual patient will receive appropriate, high-quality, effective services.

In contrast, under Patient-Centered Payment, a team of providers would only be paid for a specific patient if (a) the patient receives help for the specific condition, symptom, or risk factor the patient has and (b) the help that is provided to that patient meets pre-defined standards for quality and achieves pre-defined outcomes for that patient. This preserves a key strength of Fee-for-Service while correcting one of its key weaknesses.

6. Under Patient-Centered Payments, higher-need patients would be able to receive treatment for their conditions

Another key strength of Fee-for-Service payment is that if patients need more services, a provider will be paid more for delivering those services, so there is no reason for the provider to stint on needed care. However, a key weakness of Fee-for-Service payment is that a provider can be paid more for delivering more services even if a patient does not need them.

Except for preventive services, Patient-Centered Payment would not directly base payment on the number or types of services delivered. Instead, payment would be based on the patients' needs. A provider Team would receive a higher payment for a patient with higher needs so that the providers could deliver more services to the patient, but if the patient did not have higher needs, delivering more services would not generate a higher payment.

Under Patient-Centered Payment, provider Teams would not be discouraged from treating higher-need patients. Patients with specific characteristics that made poor outcomes more likely would be placed in a separate payment category, and the quality standards and outcomes for those patients would be based on what

evidence showed provider Teams could achieve for those patients. On the other hand, if evidence showed that a good outcome should be achievable for patients with specific characteristics, a Team's payment would depend on achieving that outcome each of those patients.

Here again, a key strength of Fee-for-Service is preserved while also correcting important weaknesses.

7. Patient-Centered Payments would depend only what the provider Team can control

Under Fee-for-Service payment, a provider receives payment for a specific service that is delivered either directly by that provider or under their direct supervision.⁸¹ In general, the provider of a service is not accountable for services that other providers deliver or do not deliver, even if they are desirable or necessary complements to the provider's own services and even if the provider explicitly ordered those services.

Many value-based payment systems, such as Shared Savings programs and Population-Based Payment Systems, have attempted to hold one provider accountable for what *other* providers do, but without actually providing any *control* over what the other providers do or any ability to influence how the other providers are paid.

Under Patient-Centered Payment, payments would be made to a *team* of providers who would deliver all or most of the services needed to diagnose a symptom, treat an acute condition, or manage a chronic health problem for an individual patient. This Team would be defined in advance and chosen by the patient (except in emergencies), and the Team would collectively be accountable for achieving the quality standards and outcomes associated with the condition it is being paid to treat or manage. The patient would have agreed in advance to only receive services related to the condition or symptom from the members of the Team, so the Team would only need to be accountable for what its members did (or did not do) for the patient.

If there are costs that could not be controlled by a provider Team, those costs would need to be paid for separately by the purchaser or patient. For example, as noted earlier, provider Teams should not be held accountable for spending increases due to increases in the prices of single-source drugs when no alternative treatments are available; similarly, a Team should not be held accountable for an increase in the price of a hospital service if there is only one hospital that is reasonably accessible and there is no alternative to delivering the service other than through the hospital. However, provider Teams should not be exempt from responsibility for a particular type of costs simply because they failed to assemble a Team that included all of the individuals or organizations that are essential to delivering care if it was reasonably possible for them to do so.⁸²

8. Under Patient-Centered Payments, the provider Team would know in advance what they would be paid for services

Under Patient-Centered Payment, the provider Team would know in advance how much it would receive for diagnosing a symptom, treating an acute condition, or managing a chronic condition for a patient with particular characteristics if the quality standards were met and pre-defined outcomes were achieved, and the Team would also know in advance that it would *not* be paid for services if the standards were not met or the outcomes were not achieved.

G. Patient Centered Payment as a Better Approach to Value

As shown in Table 8, a Patient-Centered Payment system meets the eight criteria for value-based payment defined in Section II better than any of the value-based payment and value-based purchasing approaches currently being pursued by Medicare and other payers. It addresses all four of the major problems with standard Fee-for-Service payments, but it also preserves all four of the strengths of Fee-for-Service payment that have made providers, patients, and even many purchasers reluctant to move to alternative payment systems.

As shown in Figure 4, Patient-Centered Payment does much more to provide accountability for outcomes than any current value-based payment models, and it avoids the risks of both overtreatment and undertreatment that are weaknesses of other value-based payment models.

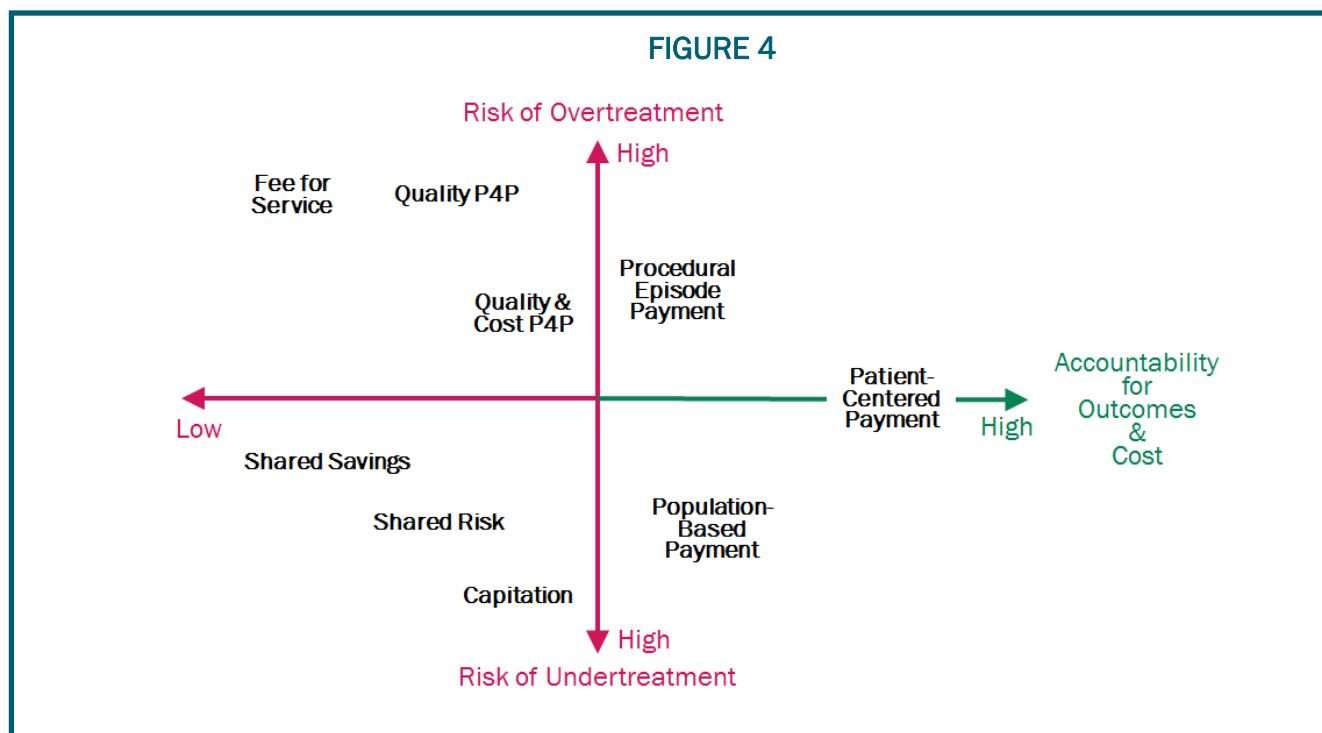
Not surprisingly, a payment system that effectively addresses all of the problems with Fee-for-Service payment looks very different than both Fee-for-Service and current value-based payment models, and it will represent a big change from what providers, purchasers, and patients have come to expect in the healthcare system. However, a Patient-Centered Payment system looks like far less of a radical change if one compares it to the payment systems used to pay for products and services in many non-healthcare industries. In particular:

- Similar to what customers expect from businesses in other industries, Patient-Centered Payment delivers patients a "complete product" at a pre-defined price that has been assembled by experts, rather than expecting the patient to choose from a list of services and prices offered by different providers with no assurance they will "fit" together, and rather than allowing providers to deliver and be paid for extra services that may not be needed or wanted by the patient.
- Similar to what customers expect with the products and services offered by high-quality manufacturers and service providers, Patient-Centered Payment gives patients a warranty on defects and a money-back guarantee based on pre-defined performance standards. But similar to the limits on warranties in other industries, the provider Teams would be held accountable only for outcomes and costs that they can reasonably be expected to control.

TABLE 8: Evaluation of Alternative Payment Models

Desirable Characteristics of a Value-Based Payment System	Fee-for-Service	Quality P4P	Shared Savings & Shared Risk	Narrow & Tiered Networks	Procedure-Based Episode Payments	Population-Based Payment	Patient-Centered Payment
1 Are providers accountable for appropriateness, high-quality, and outcomes of services for each patient?	No	No	No	No	Partially	Partially	Yes
2 Do payment rates match the cost of delivering quality care?	No	No	No	No	Not Always	Not Always	Yes
3 Do providers have flexibility to deliver the highest-value services?	No	No	No	No	Partially	Yes	Yes
4 Are patients and purchasers able to determine the total amount they will pay?	No	No	No	No	For the procedure	Yes	Yes
5 Are providers only paid when patients receive help?	Yes	Yes	Yes	Yes	Yes	No	Yes
6 Are patients with greater needs able to receive more services?	Yes	Not Always	Not Always	Not Always	Not Always	Not Always	Yes
7 Are providers only held accountable for things they can control?	Yes	No	No (Shared Risk)	No	Not Always	No	Yes
8 Do providers know how much they will be paid before services are delivered?	Yes	No	No	Yes	Yes	Yes	Yes

FIGURE 4



- Similar to businesses in other industries, provider Teams could compete in setting prices under Patient-Centered Payments to ensure the payment amounts were high enough to cover their costs without resulting in excessive profits, and they would compete to offer higher standards of performance.

H. Winners and Losers Under Patient-Centered Payments

Under the provider-centric Fee-for-Service system, providers and purchasers battle in a zero-sum game. In order to control spending, purchasers try to reduce the size of the fees they pay to providers and they use prior authorization programs and other systems to try and reduce the number of services providers deliver; both of these actions reduce providers' revenues and profit margins because they do nothing to ensure the providers can cover their fixed costs. In order to generate enough revenue to cover their costs, providers demand higher fees and resist efforts to control utilization, which increases payer spending. All of these activities result in a win-lose outcome. Although it is uncertain whether the providers or the payers will win, in general, the patient always loses.

This win-lose approach is inherent in Fee-for-Service payment because the payment for services is based on average costs, not marginal costs, so any reduction in services is likely to reduce the provider's operating margins, and any increase in services is likely to increase margins. This is particularly problematic for hospitals offering emergency services and other essential services for the community, since they must

maintain a certain minimum capacity and resources regardless of the number of patients they see. Moreover, under Fee-for-Service payment, purchasers pay the same amount whether outcomes are achieved or not, so a provider's operating margins will be lower if they make the extra effort to achieve better outcomes.

In contrast, Patient-Centered Payment would create a path to "win-win-win" solutions – a provider Team can redesign care to achieve the same or better outcomes for patients at a lower cost, within a budget that is equal to or lower than what the purchaser is currently spending but is also adequate to cover the provider Team's costs. However, this requires both providers and purchasers to redefine what "winning" means. For providers, particularly hospitals, "winning" should mean delivering good care for patients while maintaining a positive operating margin, not simply increasing their revenues. For purchasers, "winning" should mean paying no more but also no less than is necessary to achieve good outcomes for patients. For patients, winning obviously means getting good care and achieving good outcomes.

Appendix C provides two simplified, hypothetical examples of how the Acute Condition Episode Payments and Bundled Payments for Management of Chronic Conditions in a Patient-Centered Payment System could enable both providers and payers to "win" financially by delivering high-quality care to patients.

I. Is Patient-Centered Payment Too Complex?

A Patient-Centered Payment system that has nine different components, with the payment amounts for each component stratified into multiple categories based on patient conditions and needs, may seem far more complex than current value-based payment systems. But simplicity is only desirable if it can be successful, and other “simpler” value-based payment systems have not been successful. As H.L. Mencken said, “there is always a well-known solution to every human problem – neat, plausible, and wrong.”

The Complexity of the Current Fee-for-Service System

Although “fee for service” sounds like a very simple concept – the purchaser pays a fee when a provider delivers a service – the payment system that has evolved to implement that concept is extremely complex. Because the current Fee-for-Service payment system has been used for decades, healthcare providers, purchasers, and policy-makers often seem to forget how complex it actually is. For example, in the current payment systems used by Medicare (most aspects of which are emulated by private purchasers):

- There are over a dozen separate payment systems, with different payment methodologies for physician services, laboratory tests, durable medical equipment, inpatient hospital admissions, outpatient hospital services, critical access hospital services, skilled nursing facility services, inpatient rehabilitation facility services, long-term care hospital admissions, inpatient psychiatric hospital admissions, ambulance services, outpatient dialysis services, home health agency visits, hospice services, and prescription drugs,
- There are over 9,000 distinct services defined through Current Procedural Terminology (CPT) codes for which physicians and other clinicians can be paid under the Medicare Physician Fee Schedule (MPFS), and another more than 5,000 services and other items defined through Healthcare Common Procedural Coding System (HCPCS) codes that are paid by Medicare and/or other payers. Each of these more than 14,000 service codes has its own payment amount. Moreover, for many CPT services, there are two separate payment amounts defined, depending on whether the service was delivered in a hospital or not.
- There are over 700 separate Ambulatory Payment Classifications (APCs) in the Outpatient Prospective Payment System (OPPS), some of which are identical to CPT codes but have different payment amounts than what is paid under the Medicare Physician Fee Schedule, while others represent “bundles” of CPT codes with unique prices assigned to them.
- There are over 700 separate Diagnosis Related Groups (MS-DRGs) and associated payment amounts in the Medicare Inpatient Prospective Payment System (IPPS). The payment amount for an individual patient is determined in part through the complex

logic of a DRG “grouper” that considers the patient’s diagnoses that were present on admission, the procedures that were performed in the hospital, and complications that arose during the hospital stay. (Many commercial health plans use a DRG-based payment system that has even more payment categories than the Medicare system.)

- The Medicare payment system for Home Health Care services has 153 different categories of payment based on the patient’s clinical conditions, functional status, and number of services received.
- The Medicare payment system for Skilled Nursing Facilities (SNF) has 66 different categories of payment based on the patient’s medical conditions, their functional status, and the specific kinds of services they receive.

Because every provider is paid separately under these systems, the complexity multiplies when patients receive services from two or more providers, which is common for patients with serious health conditions. For example, if a patient is admitted to the hospital and receives care from only one physician there, there are over 6 million possible combinations of DRGs and CPT codes that could potentially define the total amount paid for the hospital’s services and a single service from the physician. If the physician provides multiple services and if other physicians are involved in delivering care, the potential combinations multiply even further. For a patient who is hospitalized and receives home health care afterward, there are literally billions of different combinations of payment categories and associated payment amounts.

Value-based payment systems such as pay-for-performance and shared savings do not reduce this complexity; they actually increase it by adding a new layer of payment adjustments on top of the existing fee-for-service payments. In contrast, most capitation and other population-based payment systems go too far in the other direction, by creating a single monthly payment for every patient regardless of their needs, or a monthly amount that is determined based on the patient’s chronic diseases and past health problems, with no consideration for new problems that have developed and require treatment, and with no assurance of positive outcomes for the patient.

The Simplicity of Patient-Centered Payment for Patients

From a patient’s perspective, Patient-Centered Payment would be dramatically simpler than the complex current system that is described above. Rather than being surprised by unexpected bills coming from multiple providers for services that the patient wasn’t even aware would be needed, in most cases, a patient with a specific healthcare need would make a single one-time payment or a predictable monthly payment for all of the services to address that need. Rather than potentially having to pay two or more times to get treatment that works, paying more to correct a new problem that was caused by a treatment, or paying to treat conditions that could have been prevented, the patient would know that they would only need to pay once to achieve the desired outcomes without experiencing complications.

The Complexity of Patient-Centered Payment for Purchasers

Because Medicare, a health insurance plan, or other purchaser would need to pay for care for many patients with different kinds of needs, they would need to implement all aspects of Patient-Centered Payments. Although a Patient-Centered Payment system would have 9 different types of payments, each of which would be applied to specific types of health problems and stratified into several categories based on differences in patient needs, that would still be less complex than the multiple payment systems built around multiple different types of providers and thousands of individual services that Medicare and most other purchasers are administering today. The complexity that would exist in a Patient-Centered Payment system would be limited to what is needed to reflect the inherent diversity and complexity of patient needs; it would not be designed to reinforce the structure of the current complex and fragmented healthcare delivery system that often fails to adequately address those needs at an affordable cost. Not only would a well-designed Patient-Centered Payment System be less complex than the current Fee-for-Service payment system, it would also be far less complex than value-based payment systems that add additional payment adjustments on top of that same Fee-for-Service system.

Population-Based Payment may appear to be far less complex than either Fee-for-Service or a Patient-Centered Payment system. However, the simplicity of Population-Based Payment systems like traditional capitation, in which a group of providers receives the same fixed amount each month for each patient, derives from the fact that they limit choices for patients without assuring good outcomes in return. The Population-Based Payment systems that many purchasers are currently using involve mechanisms for risk adjustment, attribution of patients, division of financial responsibility, and price-setting that can be every bit as complex as the condition-based structure of Patient-Centered Payment, while also being less understandable for patients and providers. In contrast, the greater “complexity” of a Patient-Centered Payment system would be specifically designed to enable and encourage Provider Teams to take greater accountability for quality and outcomes than they currently do under capitation and other Population-Based Payment systems.

J. Patient-Centered Payments and ACOs

Many people believe that the best way to deliver healthcare services is through Accountable Care Organizations (ACOs) – large teams of providers that take accountability for delivering or managing *all* aspects of a patient’s healthcare needs, not just what is needed to address a particular condition or combination of conditions. Although there is relatively little evidence supporting this view (to date, the ACOs in the Medicare Shared Savings Program have not been able to demonstrate significant impacts on cost or consistent impacts on quality), it is difficult to know whether these poor results are due to the fact that most ACOs are being paid

through Shared Savings payment models that fail to address the problems with Fee-for-Service payment, as explained in Section IV. Better payment models are needed by ACOs as well as other providers.

Unfortunately, many proponents of ACOs and other integrated delivery system concepts oppose the creation of bundled payment programs, including the types of condition-based bundled payments that are the core of the Patient-Centered Payment concept. They not only assert that global, Population-Based Payment systems are better than condition-based payment models, they claim that creating payments other than a Population-Based Payment system threatens the ability to create and successfully operate ACOs.

This reflects a *provider-centered* approach to care delivery and payment, not a *patient-centered* approach. Although proponents assert that ACOs will deliver better care to patients, current ACOs do not assure any individual patient that they will receive the best-quality care available for the patient’s specific health problems. Even if an ACO has a higher average score on a quality measure than other providers does not mean that the care for an *individual patient* will be better on that measure than what the patient would have received from other providers. Moreover, the implicit assertion is that the ACO will do a better job of delivering or managing care for thousands of different types of conditions and for patients with a wide range of characteristics, yet there is no way to know if that is true when there are only a small number of narrowly-defined measures of the quality of the ACO’s care. There is currently no way for a patient with a heart valve problem, back pain, cancer, or rheumatoid arthritis to know if an ACO is delivering better care for those conditions than other ACOs or providers who are not part of an ACO.

Some ACOs have been credited with reducing utilization of services and associated spending for purchasers while also improving quality, but there is only limited information available about exactly how those savings were achieved. Moreover, there is no way to determine whether the types of patients who received fewer or lower-cost services also had good outcomes as a result. Since the ACO’s performance is evaluated in aggregate, not with respect to individual patients or even groups of patients with similar characteristics, failure to deliver needed services to some kinds of patients could generate significant savings with no adverse impact on the general measures of quality that are being used. For example, treating cancer patients with lower-cost and less-effective chemotherapy would reduce an ACO’s spending but it would have no negative impact on the quality measures that are used to evaluate it.

In contrast, under a Patient-Centered Payment system, if a patient selects a provider Team to treat or manage a heart valve problem, back pain, cancer, or rheumatoid, the patient would know the Team would be responsible for meeting quality standards and achieving pre-defined outcomes associated with that specific health condition for that individual patient, not merely on average across a group of patients in the past. If another provider Team believed it could deliver higher quality care to the patient and/or deliver care at a lower cost, it would make that

commitment in advance, and the patient could choose a provider Team based on that information.

If an ACO can deliver better care and/or lower cost care to a patient for their specific health conditions than other provider Teams, the ACO should be asked to assure the patient of that by agreeing to achieve the same or better quality standards and outcomes for each of the patient's problems as other provider Teams that the patient could select to treat or manage that specific problem. If the ACO believes that by delivering coordinated care for all of the patient's conditions, it can achieve better results at a lower cost than if the patient received care separately from individual providers, it should offer a "package" of services for all of those conditions for a combined price and with pre-defined quality standards, and allow the patient to determine whether choosing the package would be better than *a la carte* care.

Realistically, it is unlikely that any ACO can provide better care than all other provider Teams for every health condition that patients in a large population may develop. Consequently, if an ACO either requires or encourages patients to obtain all of their care from ACO providers, it could lead to worse outcomes for patients and deter individuals from seeking any of their care from the ACO. A Patient-Centered Payment system would allow the ACO to both achieve better results for its patients and attract more patients in two ways:

- If a patient develops a health condition and the ACO can deliver care that is equal to or better than what other provider Teams could deliver, the ACO would be able to demonstrate that objectively by committing to the same quality standards and outcomes as the other Teams.
- If a patient develops a health condition and the ACO does *not* have the best team to treat or manage the condition, the ACO could refer the patient to a better provider Team for treatment of that health problem and coordinate other aspects of the patient's care with that Team. Because the other Team would be charging a predefined price for the care, the ACO could easily budget for that cost, rather than being concerned that referral to another provider could trigger an unpredictable series of Fee-for-Service charges.

In addition, even if an ACO is being paid through some type of global Population-Based Payment system, it will need to have a way of compensating the physicians, hospitals, and other providers who are part of the ACO for the specific types of care they deliver. Most ACOs currently pay providers using traditional Fee-for-Service or some type of Pay-for-Performance system, which means those individual providers still face many of the same barriers and problematic incentives as they would if they were not part of the ACO. Moreover, even if the ACO views itself as one large coordinated team, as a practical matter, most patient care will be delivered by small groups of providers focused on specific patient needs. Patient-Centered Payments provide a mechanism for an ACO or other integrated delivery system to divide up an overall population-based payment in a way that supports high-quality, efficient care from the individual teams that deliver care to individual patients.

VIII. TRANSITIONING TO PATIENT-CENTERED PAYMENT

A Patient-Centered Payment System represents a significant change from both Fee-for-Service payment and current value-based payment systems such as P4P, Shared Savings, Procedure-Based Episode Payments, and Population-Based Payments. Although the evaluation in Section VII shows that a Patient-Centered Payment system is superior to all of those other payment systems, implementing it will require a number of steps:

- The patient characteristics that significantly affect outcomes and affect the costs of delivering care that achieves those outcomes will need to be identified in order to define patient categories for each type of condition-based payment;
- The performance standards and outcomes expected for different conditions and patients will need to be defined and measured in order for payments to be based on whether those standards and outcomes are achieved;
- The services that are required to achieve the standards and outcomes and the cost of delivering those services will need to be identified in order to set prices for the condition-based Patient-Centered Payments; and
- The providers that will be involved in delivering the services will need to form Teams, and in order to accept condition-based bundled payments, those Teams will need to determine how they will deliver essential services cost-effectively and how they will allocate the bundled payment among themselves.

There are significant interdependencies among these elements that require them all to be designed in a coordinated way. For example, determining the amount that should be paid requires defining the services that would be required to achieve the performance standards, which in turn depends on what those standards are. However, performance standards cannot be set without consideration for what it will cost to achieve them and whether purchasers and patients are willing to pay those amounts.

Moreover, it will be impossible to confidently specify all of the parameters of a Patient-Centered Payment System (i.e., category definitions, outcome requirements, and payment amounts) until after the payment system has actually been in place for several years. For example, in many cases, it will be difficult or impossible to determine what levels of performance are possible at what costs prior to implementing the new payment system because the necessary data are not currently being collected or because barriers in the current Fee-for-Service system have prevented providers from delivering care in innovative ways. Because Patient-Centered Payments would better support value-based patient choices and competition among providers on both outcomes and

cost, it will encourage higher levels of performance and lower costs than demonstration projects alone would be expected to achieve, but this will not be known until after the payments are in place.

Consequently, a multi-year transition period will be needed. During the transition period, initial parameters for Patient-Centered Payments will have to be established with the full expectation that they will be modified shortly after implementation begins and then modified again on a rapid-cycle basis for a period of time thereafter. The goal should be to achieve some benefits while avoiding significant negative impacts for all stakeholders – patients, providers, and purchasers – during the transition period so that they can continue participating until full implementation occurs.

The approaches described below can be used to initiate and evolve each of the components of Patient-Centered Payments during this transition period.

A. Setting Performance Standards

Patient-Centered Payment would promote better outcomes for patients by making payments contingent on achieving good outcomes. In order to establish performance standards for such an outcome-based payment system and to determine adequate payment amounts for achieving good outcomes, data will be needed on the outcomes that provider Teams are able to achieve. However, relatively little outcome data is being collected today because Fee-for-Service payments don't depend on outcomes and so there is no business case for providers or purchasers to collect such data. Consequently, the transition period will need to allow time and provide resources to enable outcome data to be collected and analyzed. Moreover, because Patient-Centered Payments would give provider Teams the resources, flexibility, and incentives to improve outcomes, the expectations for outcomes will need to evolve during the transition period as it becomes clear what outcome levels can be achieved with a better payment system.

The following approach could be used to set initial performance standards for each type of Patient-Centered Payment, adjust them during the transition period, and then increase them over time.

1. Requiring Process Standards While Outcome Data Are Collected

Initially, a provider Team should only be expected to meet process standards that are known to be achievable for all or almost all patients with the particular condition that is being treated or managed. These standards would be established based on existing laws and regulations, on professional standards where universal adherence is expected, and on evidence-based quality

measures where high performance is known to be achievable by large number of providers under current payment systems. If different process standards are appropriate for patients who have the same health condition but differ on other characteristics, separate categories for these patients would be established. The Team's payment for services to a patient would be contingent on meeting the process standards appropriate for that patient. This would represent a significant, immediate improvement over current Fee-for-Service, Pay-for-Performance, and Shared Savings programs, where providers are paid for services to a patient even if minimum standards of quality are not met.

During this initial phase, provider Teams should also collect data on the patient outcomes that would ultimately be incorporated into the performance standards, and they should also collect data on any patient characteristics likely to affect costs or outcomes that are not currently collected in claims data. The payment amounts during this initial phase would need to be adequate to cover the cost of collecting the outcome data as well as delivering services to patients.

2. Setting Initial Outcome Standards

As soon as outcome data are available, initial outcome standards for each condition and category of patients should be established through mutual agreement of providers, purchasers, and patients based on the outcomes that provider Teams are currently able to achieve for at least 90% of patients in a category. If analysis shows that specific patient characteristics significantly affect the level of outcomes that can be achieved for patients with a particular health condition, the definitions of the patient categories within that condition would be refined to reflect those characteristics, and the outcome standards for each category would then be set accordingly. Payment amounts should be adjusted to reflect the expected rate of achieving the outcomes (using the approach described in Section VIII), and Provider Teams would then be paid only when they achieved the defined outcome.

3. Encouraging Voluntary Commitments to Higher Outcome Standards

Any provider Team that wished to do so could voluntarily commit to meet additional or higher performance standards or outcomes for any or all categories of patients, and to only accept payment when those standards or outcomes were achieved. If a provider Team was willing to commit to a higher performance standard but also wished to be paid a different amount, a purchaser could decide how much of that different amount it would pay and how much the patient would need to pay. Both the patient and purchaser would know in advance the standards each provider Team was committing to meet for the patient (rather than merely what the provider Team has done for other patients in the past) and how much the patient and purchaser would need to pay for that care.

There are several different options for how the cost-sharing amounts could be set:

- If the provider Team wants to charge a lower price for the higher standards/outcomes, then the patient should also be charged a lower cost-sharing amount to encourage use of the higher-value provider.
- If the provider Team wants to charge a higher price for the higher standards/outcomes, the purchaser could still charge the patient a lower cost-sharing amount if the purchaser believed that the higher standards/outcomes would save money elsewhere or were otherwise desirable from the purchaser's perspective.
- If the provider Team wants to charge a higher price and the patient would benefit from the improved outcomes but healthcare spending would be higher, the purchaser could require the patient to pay the difference in the price, so the patient could decide if the better outcomes were worth the higher price.
- If there is only one provider Team offering a particular kind of care in a community, and if Teams in other communities were offering to meet higher standards and/or charge less for their services, then the purchaser could determine whether it was feasible to pay for transportation or otherwise enable patients to receive care from the Teams in other communities.

4. Allowing Competition to Increase Outcome Standards Over Time

If patients begin switching to provider Teams that commit to higher standards, other Teams would have an incentive to also meet the higher standards in order to retain patients and attract new patients. Moreover, if more patients use the Teams who do commit to achieving higher standards, those Teams could potentially lower their prices (since the higher volume of patients will make their average costs lower), and that could then further encourage patients to use the higher-performing Teams. Conversely, if patients did not choose the Teams that committed to achieving better outcomes or meeting the higher standards, it would be clear that most patients did not value those outcomes or standards, at least not at the prices being charged.

Once a majority of provider Teams have voluntarily committed to meet higher standards for a subcategory of patients, the higher standards can become the new minimum standards of performance for all Teams. Some Teams could then choose to adopt even higher performance standards to once again distinguish themselves from other Teams in order to attract additional patients, continuing the virtuous cycle of improvements in value. This process would encourage higher-value healthcare delivery using the same kinds of market forces that encourage development of higher value products and services in other industries. Minimum standards of quality would be required from all Teams, and individual Teams would be rewarded for innovations that improve value. An individual patient could make choices between provider Teams based on a clear understanding of the standards of performance that the Team will achieve for that patient, rather than based on the Team's historical average performance for other patients.

B. Setting Payment Amounts

Many bundled payment programs establish prices by determining the average amount that is currently being paid for the services related to a particular procedure, condition, or patient under the Fee-for-Service system, and then applying an arbitrary discount to that amount. However, because current Fee-for-Service payment amounts may be much higher or lower than the actual cost of delivering services, calculating a bundled payment in this way can lead to payment amounts that are too high or too low to support delivery of care that is consistent with the desired quality standards and outcomes.

The following approach could be used to set initial payment amounts for a specific patient condition under Patient-Centered Payments, adjust them during a transition period, and then modify them over time:

1. Obtaining the Data Needed to Establish Payment Amounts

Before implementation could begin, four sets of information and analysis would need to be assembled for each category of patients with the health condition:⁸³

- **Current Average Utilization of Services (U).** Data would be obtained on the average number and types of services that were related to the condition and were being delivered to patients in that category whose care met or exceeded the initial performance standards. The average would be calculated based on the utilization of services in the most recent year for which data are available.
- **Estimated Cost Per Service (C).** The average cost for providers to deliver each of those services would be estimated. This should include any margin needed to cover replacement costs for facilities and equipment, interest on debt, etc. If there are significant geographic differences in the input costs used for delivering the services that would be outside the control of provider Teams, then geographic-specific costs and payment rates may be needed.
- **Costs for Outlier Patients (O).** Any individual patients who received services that cost more in aggregate than a specific percentage of the overall estimated average per-patient cost would be identified. The percentage would be the initial “risk corridor” that is determined to be financially affordable for the types of provider Teams that would be delivering care for these patients.⁸⁴ For example, the initial risk corridor might be set at 3% for a provider Team, meaning that the provider team could financially tolerate costs up to 103% of revenues, but additional payments would be needed if care cost more than that. The differential cost for each of these high-cost patients would be calculated by subtracting 103% of the overall average from the actual total cost of the patient’s care. All of these individual amounts would be summed and divided by the total number of patients who received services. This per-patient amount would be set aside for purchasing stop-loss insurance or to fund a shared-risk pool to cover such costs when they occurred.

- **Expected Reduction in Costs (D).** An estimate would be made of the net change in average costs that could be achieved, either by substituting currently unpaid or underutilized services for services that are currently being used, or by redesigning existing services for greater efficiency. This would require estimates of the costs of the new/expanded services, estimates of the expected reduction in utilization of existing services, and estimates of the savings that might be possible through restructuring of existing services. For example, if studies had shown that video visits with patients could be substituted for a certain portion of office visits, or that home-based therapy could be used in place of institutional rehabilitation for a subset of patients, the impact of those changes in utilization and cost could be applied as a “discount” to the estimated current average per-patient cost.
- **Current Average Spending on Services (S).** Finally, data would be needed on the amount that each purchaser is currently spending on services related to the condition for patients in each category. This would reflect not only the utilization (U) for the patients, but the amounts that purchaser is paying for the individual services (which may be higher or lower than the costs per service).

2. Setting Initial Payment Rates

Once these data are assembled, the initial payment amount for a particular category of patients could be set equal to $((U \times C) - O - D) + S$. This initial payment amount could well be equal to S, i.e., the purchaser would spend the same amount as they did under Fee-for-Service. Unlike Shared Savings models, Patient-Centered Payments would not *require* that there be savings in order for the provider Team to deliver new or different services. Moreover, under Patient-Centered Payments, the purchaser and the patient would benefit from having greater certainty about what they would spend and also greater certainty about the quality of care and the outcomes that would be achieved. In contrast to Shared Savings models, the purchaser would save a significant amount of money if the patient did not achieve the desired outcomes.

In most cases, however, the initial amount should be lower than S, i.e., the proposed payment should provide some savings to the purchaser, simply because there are so many areas today where there is overutilization of services, avoidable complications of care, and prices that are significantly higher than costs. If the initial estimate for the Patient-Centered Payment amount is higher than current spending, the first step should be for provider Teams to look for additional ways to achieve reductions in cost.

In some cases, this process of analysis and design will reveal that purchasers are currently underpaying for effective care for certain types of patients (either because the patients are being undertreated or because Fee-for-Service payments are lower than the minimum feasible cost of delivering services), and that higher payments are needed to ensure high-quality care and good outcomes for those patients. However, these higher payments for specific conditions and patients would not

need to result in higher overall spending for the purchaser, since it is likely that the purchaser would receive savings for other types of conditions and patients. Under Fee-for-Service, many providers are currently being forced to cross-subsidize services, using profits on some services and patients to offset losses on other services and patients. To be successful, a Patient-Centered Payment system will not only need to change the methods of payment, but also to rebalance payment amounts so that payments better match the true costs of care for each individual condition.

Adjusting Patient Categories and Payments

If the number and types of services differ significantly for different subgroups of patients within the same patient category, or if greater reductions in costs are expected to be possible for some subgroups than others, then the categories of patients should be refined to reflect those differences, and the above calculations would then be revised to determine the payment amounts for each category.

If data on utilization and costs are not available for individual categories of patients, initial estimates of the difference in costs between categories could be based on the results of research studies or pilot projects. For example, if a study found that among the patients treated for a particular condition, 40% of the patients had functional limitations and service utilization for those patients was twice as high as for the patients without functional limitations, the average spending level calculated for all patients with the condition would be increased by 43% to estimate the spending for the category of patients with functional limitations, and the average spending level would be reduced by 29% to estimate the spending for the category of patients with no functional limitations.⁸⁵

In addition, if the patient categories are refined after data on outcomes are collected, the payment amounts would then need to be recalculated again based on the costs of caring for the types of patients in each of the new categories.

Paying Separately for Medical Education

If providers are currently receiving payments for things other than patient services as part of their current fee-for-service payments, those amounts would need to be paid separately, outside of the Patient-Centered Payment system. For example, hospitals currently receive support for a portion of their teaching costs as part of the Medicare payments they receive for each admission. This means that when a hospital has fewer admissions, it loses a portion of the revenue it needs to support its medical education program. These payments should be delivered through a separate program that is specifically designed to support teaching costs, rather than by paying hospitals more for each of the services they deliver.

3. Encouraging Competition on Price

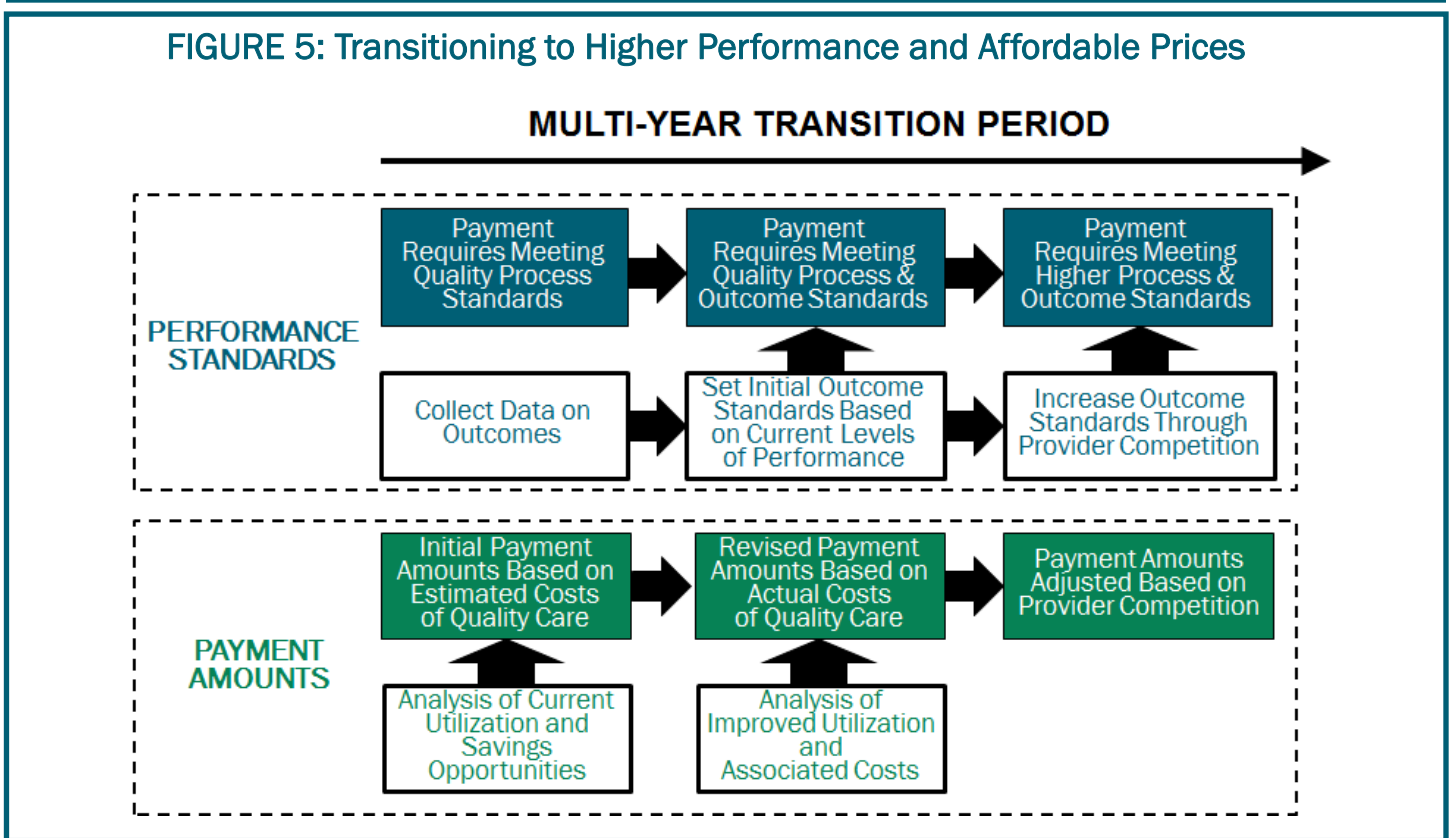
In markets where there are multiple provider Teams offering care for patients with a particular condition in a specific category, the provider Teams should have the option to charge prices that differ from the initial default payment amount while still meeting the same performance standards. If a patient used a provider Team that charges a different price, the purchaser would adjust the patient's cost-sharing in one of the following ways:

- If a provider Team charges a lower amount, the patient's cost-sharing amount should be reduced proportionally. Teams could be prohibited from reducing their price by more than 5% unless they could demonstrate that the price exceeded their fully-allocated costs and no cross-subsidy was being used to support the lower price.
- If a provider Team charges a higher amount without a justification showing that costs are higher, the patient's cost-sharing amount should be increased by the difference in the price (i.e., the patient would pay the entire difference in price in addition to the standard cost-sharing amount). A provider Team in a non-competitive market could be precluded from charging a higher price unless it could demonstrate that a low volume of patients or other unique circumstances made it impossible to deliver the care at the standard payment amount. For example, many rural provider teams would likely need the ability to charge a higher price to reflect the higher average cost of delivering services when there were fewer patients than the minimum capacity of physicians, equipment, etc. In these cases, the purchaser could charge the patient the same cost-sharing amount even though the price was higher, in order to avoid discouraging the patient from receiving necessary services.

Once competitive forces had achieved a reasonably stable price for a particular type of payment and condition, that standard price should then be increased annually to match general inflation in the economy.

This approach would allow market forces to support better price-setting than an administered pricing system that attempts to determine the "right" price through a combination of research by regulators and advocacy by providers. If standard prices are inadequate to cover the costs of delivering care for a particular condition, a provider Team should have the ability to charge more, rather than being forced to deny services to patients who need them or to subsidize losses by finding ways to overcharge for care of other conditions. As long as there are other provider Teams who could look for ways to charge less and there are no barriers to entry for those Teams, Teams couldn't charge higher prices just to increase profits for very long. If a provider Team developed a way of delivering care for a particular health condition at a lower cost, it could charge a lower price and attract more of the patients who have that condition, thereby encouraging other Teams to follow suit. This would complement the market-driven approach to performance standards discussed above. Provider Teams would have incentives both to (1) more efficiently deliver care for a given performance standard and (2) achieve higher levels of performance at any given price point.

FIGURE 5: Transitioning to Higher Performance and Affordable Prices



C. Defining and Paying Teams

Under Fee-for-Service Payment, every physician, hospital, and other provider is paid separately for each specific service they render. Patient-Centered Payments, however, would be defined based on patients and their health conditions, rather than on providers and services. Under Patient-Centered Payments, a group of healthcare providers would need to work as a Team to successfully deliver all of the services the patient needed to achieve predefined outcomes for a particular condition in return for a pre-defined payment amount.

The Role of Integrated Systems and ACOs

It might seem as though the rapidly growing proportion of physicians and hospitals that are part of integrated delivery systems and accountable care organizations means that many such Teams already exist. However, it appears that in most cases, “integration” has primarily involved the legal merger of corporate structures rather than the creation of more effective ways of delivering care. Even in many ACOs and clinically integrated networks, providers still function primarily in clinical silos, and “integration” efforts are often focused on use of a common electronic health record system or limiting where patients are referred for services rather than fundamentally changing the way care is delivered.⁸⁶ In addition, many payer-defined Narrow Networks have made Team-based care more difficult because the selection criteria for participation in the Narrow Networks do not include all of the members of a high-performing Team.

It would not be necessary for all of the members of a Provider Team to work for the same corporate entity in

order to participate in a Patient-Centered Payment system; indeed, it may actually be undesirable for them to do so, for two reasons:

- An individual physician, hospital, or other healthcare provider will likely be a member of multiple Teams, so that each Team can include the best individual providers for the types of conditions and patients the Team is treating or managing. The best providers for a particular Team may not all work for the same organizational entity, and limiting Teams to providers who do work for one organization could result in poorer outcomes for patients and higher costs for purchasers.
- A physician or other healthcare provider who believes that a Team they are currently participating on is not able or willing to achieve the highest performance possible should have the ability to join or form a different Team, even if that means forming a Team with providers who work for different organizational entities.

Capabilities Needed by Teams Delivering Patient-Centered Care

Because most providers are not currently organized as high-performing Teams, it will take some time for them to create all of the capabilities they need to do so:

- Individual providers will need objective, data-driven ways of determining who they should invite to serve on the Teams they lead and which other Teams they should join;
- Teams will need mechanisms for effectively coordinating services among all of the members of the Team.

While health information technology can facilitate this, it is unlikely that HIT alone will result in high-quality, efficient delivery of care;

- Teams will need ways to measure the individual and collective performance of the Team members and they will need mechanisms for making changes to the way care is delivered when outcomes are poor or costs are too high; and
- Teams will need mechanisms for accepting and allocating a single bundled payment for treating or managing a condition among all of the members of the Team.

Process for Transitioning to Team-Based Care

The transition period should be designed to allow providers adequate time to form high-performing Teams. The following approach could be used to enable providers to participate immediately in a Patient-Centered Payment system while they are still forming all of the Team structures they need to jointly accept and manage payments for the care of patients:

1. Allowing Partial Teams to Have Limited Accountability for Non-Participating Members

It is likely that in many cases, significant improvements in outcomes and reductions in costs can be achieved initially even if only a subset of the providers who will be involved in the patient's care have agreed to join a formal Team that accepts accountability for outcomes and costs. To support this, providers who form a Partial Team could accept full accountability for outcomes and costs associated with their own services, but accept more limited accountability for outcomes and costs that are primarily associated with the non-participating providers. For example, a physician would likely be able to make many improvements in the way care is being delivered to patients with specific conditions even if the laboratories and imaging facilities that perform necessary tests and studies are not formally part of a Team and if those other provider Teams want to be paid using standard Fee-for-Service mechanisms rather than sharing the funds from a bundled payment. The physician could accept a bundled payment that covers the cost of all tests that the physician orders, but the physician would not be expected to cover the additional costs or other problems that result if the laboratory or imaging facility makes an error in performing the test or study.

2. Using Retrospective Reconciliation of Fee-for-Service Claims

Even when providers form full Teams that are willing to accept full accountability for outcomes and costs for specific conditions, it will likely be difficult in the near term for the individual providers on the Team to stop billing for individual fee-for-service claims for any patients, particularly if not all purchasers are participating in the Patient-Centered Payment system or if a purchaser has not yet implemented Patient-Centered Payments for all health conditions. Moreover, the Team may not

have the administrative systems in place to pay each of the Team members their share of the overall payment in a timely fashion. To address this, each of the providers on the Team could continue to bill the purchaser for Fee-for-Service claims, and then those claims would be tallied and reconciled against the amount of the Patient-Centered Payment, using the mechanism described in Section V.

Creation of New Billing Codes for Patient-Centered Payments

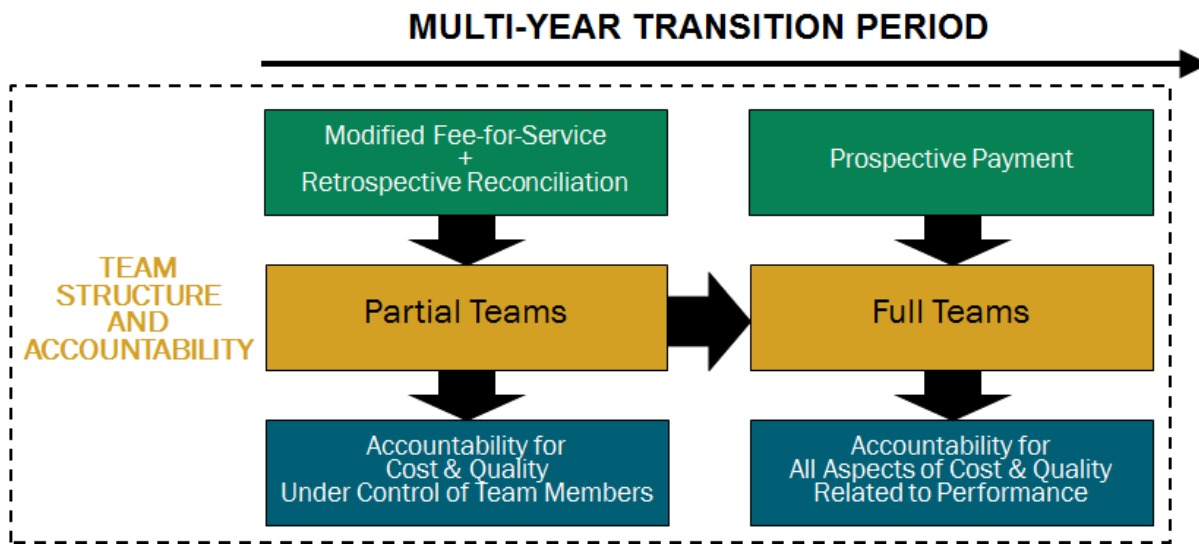
If there is a new service that the Team plans to deliver to patients for which there is no current Fee-for-Service payment, the purchaser should permit providers who are on the Team to bill for that service and be paid for it. Only the providers on a Patient-Centered Payment Team would be permitted to bill for the service; allowing them to do so would not increase the purchaser's spending, because the provider Team would have to repay the purchaser if the total payments for all billed services exceeded the Patient-Centered Payment amount.

The provider Team would need to have a way of telling the purchaser which health condition was being addressed, the category into which a patient should be classified (based on the patient's characteristics), and whether the quality standards and outcomes were achieved in order to determine the appropriate payment amount. This will require the creation of a new set of Patient-Centered Payment billing codes that provider Teams would submit to the purchaser along with the claims for individual services. When the purchaser (or their claims payment agent) received a Patient-Centered Payment code for a patient, it would trigger a process for tabulating all of the payments for related services that are delivered to the patient. In order for the purchaser to determine which individual service claims should be associated with a Patient-Centered Payment, a modifier would need to be added to the CPT or HCPCS code for that service to indicate that it was part of the Patient-Centered Payment.

3. Transitioning to Prospective Payments

As soon as a sufficient number of Teams are ready to accept the Patient-Centered Payment as the full payment for their services and to allocate it amongst themselves, the Teams could begin billing for the Patient-Centered Payment rather than individual services. The new Patient-Centered Payment codes developed during the retrospective reconciliation phase would then become actual billing codes rather than simply mechanisms of signaling a patient's condition and payment category, and the members of the Provider Team would no longer bill for the individual services they deliver.

FIGURE 6: Transitioning to Full Teams and Full Performance Accountability



D. Supporting a Successful Transition

No New Payment System Will Be Perfect, Particularly Initially

It will likely take several years to fully implement a Patient-Centered Payment System, and there will undoubtedly need to be many refinements for years after that. However, the same would be true of any significant change in payment systems. The major payment systems that are currently being used by Medicare and other payers were not “perfect” when they were first implemented; many adjustments were made during the initial years of implementation, and adjustments continue to be made to this day. This occurred for the same reasons described at the beginning of this section – the information needed to fully specify the new payment system could not be obtained until the payment system was actually in place.

For example, when the Inpatient Prospective Payment System (IPPS) was first implemented in 1983, it was impossible to know how much a hospital stay should cost because the payment system at the time encouraged unnecessarily long stays and delivery of unnecessary services. As soon as the IPPS system was in place, hospitals dramatically restructured the way they delivered care, resulting in significant reductions in the length of stay and corresponding reductions in the cost per admission. As a result, in many cases, the initial IPPS payment amounts were unnecessarily high, and so the payment amounts were adjusted in subsequent years to better match the lower costs that were now known to be feasible.⁸⁷ Similarly, the initial Diagnosis Related Groups (DRGs) used in IPPS did not adequately differentiate payments between patients with greater and lesser needs, raising concerns that hospitals with higher numbers of higher-need patients were being

harmed financially. In response, additional patient categories were defined based on their comorbidities and complications and those were incorporated into a revised system called MS-DRGs.

Not All Providers Will Want to Participate Initially, and They Don’t Need To

As explained in the previous sections, it will be impossible to define ambitious but achievable outcome standards, set adequate but affordable payment amounts, and determine the best way of stratifying patients under Patient-Centered Payments until the payments are actually implemented and provider Teams are using them to support improved care. It will also take time for providers to form complete Teams and develop all of the capabilities needed to successfully deliver higher-quality care at a lower cost. Providers who have already been trying to improve care but have faced barriers under fee-for-service and current value-based payment systems will likely embrace the opportunity to have a better payment system even before all of the details have been resolved and they will also likely want to be part of the process of refining the details. Other providers will understandably be reluctant to engage until more of the details have been resolved and until after they have taken additional steps to prepare themselves for new approaches to care delivery and payment.

Fortunately, it is not necessary that all providers participate in Patient-Centered Payments immediately in order to successfully begin the implementation process. Initial participation by a small number of providers would be sufficient to allow data on outcomes, costs, and patient characteristics that affect outcomes and cost to be gathered and analyzed in order to refine the key parameters of the Patient-Centered Payment model as described earlier.

Moreover, even if only a small subset of the providers in a market form Partial Teams, accept accountability for achieving basic performance standards in return for payment, and define in advance the total amount that a patient or purchaser will spend for treatment or management of a specific condition, that would be sufficient to jump-start more effective market forces in healthcare that will lead to higher outcome standards and lower prices over time. As long as patients are given understandable information about the commitments to performance standards and predictable costs that are available from the Patient-Centered Payment providers, it is highly likely that a significant number of patients will choose care from those providers rather than those who make no commitment as to performance or total cost. This will encourage more providers to voluntarily participate in the Patient-Centered Payment System, and over time, it will become the *de facto* standard method of payment.

From an operational perspective, it is very feasible for Fee-for-Service payment and Patient-Centered Payments to co-exist during the transition period, i.e., some providers can be paid using Patient-Centered Payments while the rest continue to be paid using traditional Fee-for-Service Payments. As described earlier, provider Teams who are participating in Patient-Centered Payments can continue to be paid using standard Fee-for-Service claims followed by a retrospective reconciliation to the Patient-Centered Payment amount. Even providers who are able and willing to accept a prospective payment would bill for that payment using a new type of billing code. As a result, payers would not have to change the fundamental structure of their claims payment systems; they would simply need to add additional codes and modifiers and use software systems that are already available to reconcile claims against the Patient-Centered Payment amounts.

Implementing and Improving Payment Models Instead of Testing and Evaluating Them

Unfortunately, to date, the federal government has been pursuing payment reform in a far less effective way than this. Under federal law, in order to implement a new alternative payment model in Medicare, it must be “tested” by the Center for Medicare and Medicaid Innovation (CMMI). The process CMMI has used to carry out testing has been extremely slow, expensive for CMMI, burdensome for providers, and unlikely to result in significant impacts. Although many proposals for innovative alternative payment models have been submitted to CMMI, most have not been implemented, partly because of the lengthy and complex design and review process used to determine which payment models will be tested. In most cases, when a payment model is tested, only a small number of providers are permitted to participate for many years even if there is broad interest in participation. Under most of the payment demonstrations that CMMI has implemented, 18 months or more have elapsed from the time an initiative is first announced to the time when providers actually begin to receive different payments. Many providers have decided not to even apply to participate in otherwise desirable CMMI pro-

grams and others have dropped out of the programs in the early phases solely or partly because of the cost and time burden of participating.

In most cases, providers who do participate in CMMI payment models are told they can only count on the new payments lasting for a few years; the payments will only be continued beyond that if an evaluation proves that the program has saved money for the Medicare program. While this might sound like a very prudent approach, it could have the perverse effect of reducing the chances of significant success. Physicians, hospitals, and other healthcare providers are unlikely to fundamentally change the way they deliver care in response to a payment change that may only last a few years, and it is impossible to measure longer-term impacts on outcomes during an evaluation period that lasts only a few years. Moreover, as noted above, it is essentially impossible to adequately define the parameters of a significantly different payment model until it has actually been implemented. However, since changing a payment model makes it more difficult to evaluate it within a limited period of time, many payment models continue to be tested despite widespread awareness of serious flaws that will likely reduce their effectiveness.

In contrast to current value-based payment models, the design of Patient-Centered Payments would reduce the need for an evaluation to determine whether spending was lower and quality was higher. Provider Teams would be explicitly guaranteeing to reduce the types of spending for a particular condition compared to current levels, and they would be explicitly assuring that quality standards would be met and outcomes would be achieved. If at any point, CMS or another payer identifies a situation where quality is being harmed for a particular provider Team’s patients, or where spending is not truly being reduced, that Team’s participation in the payment model could be terminated, similar to what CMS can do today in its standard payment systems and that private payers can do through the contracting process. Rather than framing the decision in terms of continuing or terminating the entire payment model, the decision should be whether the payment model should be refined and whether individual Teams should continue to participate.

Fortunately, Federal law permits a more effective approach to be used. There are no limits in the law as to (1) how many providers can participate in testing, (2) how the evaluation should be conducted, (3) how quickly a determination is to be made as to whether the model improves quality or reduces spending, or (4) how often the design of a model can be modified before it is terminated or expanded. Under the law, the Secretary of Health and Human Services is authorized to modify the design and implementation of a model after testing has begun if the model is not expected to either improve quality without increasing spending or reduce spending without reducing quality.

Alternatively, Congress could pass new legislation to specifically authorize use of Patient-Centered Payments to pay provider Teams that wish to participate. This is the approach it used to implement shared savings payments for ACOs – the Medicare Shared Savings Program is a

permanent program, not a temporary demonstration project, but participation in it is voluntary for providers. The authorizing legislation already permits CMS to use payment models other than shared savings, but other provisions would have to be changed to permit provider Teams other than ACOs to participate and to do so for patients with specific health conditions.

How Private Purchasers Can Support the Transition to Better Payment Models

Commercial health insurance companies have also been slow to implement fundamental changes in their payment systems, preferring instead to use Pay-for-Performance, Shared Savings programs, and Narrow Networks as their only approaches to “value-based payment” and “value-based purchasing.” This is not surprising, however, since there is not a strong business case for these intermediary organizations to change the way they pay providers. The significant savings that could be achieved through Patient-Centered Payments would either accrue to self-funded purchasers (for the self-insured portion of the plans’ business) or to insured policyholders (for the fully insured portion of their business), while the health plan would need to incur the additional costs of implementing the new payment systems while cutting back on overall administrative expenses and profits to match its lower total revenues.

Consequently, leadership for change in commercial insurance will need to come from private purchasers, not from health insurance companies. Private purchasers have greater flexibility to implement innovative payment

models than do Medicare and other government purchasers, but they will also need to work with each other and with healthcare providers in new ways in order to have a significant impact on payment reform:

- Because even large purchasers only insure a small proportion of any provider’s patients, it will be important for the purchasers in each community to work together in order to create the critical mass of patients needed for provider Teams to change the way they deliver care.
- Purchasers will need to be willing to contract directly with provider Teams rather than relying on commercial health plans to do so. Patient-Centered Payments will make this much easier, because rather than having to process and pay claims for individual services, there will only be a single payment for each health condition or combination of conditions that a patient has.
- Purchasers will need to work with provider Teams as partners in transforming healthcare delivery, rather than as adversaries. As described earlier, the parameters of Patient-Centered Payments will need to evolve over a multi-year period as better data on outcomes and costs become available and as providers work to improve care delivery. Provider Teams will need to show purchasers that they are committed to delivering higher-value care, and purchasers will need to support win-win-win approaches that are financially sustainable for providers as well as more affordable for purchasers.

IX.

CHOOSING THE RIGHT PATH TO THE FUTURE

A. The Need for Radical Reforms in Healthcare Delivery

The high and growing cost of America's healthcare system is increasingly limiting the country's financial ability to address many other important needs, and it is affecting the nation's competitiveness in the world economy. The single biggest driver of federal deficits is now the spending on the Medicare program and other health programs, and the fastest growing component of state budgets is spending on the Medicaid program. Although private health insurance is easier to obtain than it was a decade ago, it is also far less affordable. Annual increases in compensation for employees of private businesses are primarily being used to pay for higher health insurance premiums for the workers, not to increase their salaries and wages. Yet due to higher deductibles, those higher premiums cover a smaller proportion of workers' healthcare costs every year, which means they have to spend a higher proportion of their stagnant wages when they need healthcare services. Many people who have insurance are finding they can't afford to obtain necessary healthcare services while also having enough money to pay for food, utilities, and other essentials.

Despite the high and growing levels of spending on healthcare services, healthcare quality remains highly variable and, on average, stubbornly mediocre. Many patients develop health problems that could have been prevented, receive tests and procedures that are not needed, are hospitalized because their health problems were not effectively managed, or experience complications and infections that could have been avoided. Patients are forced to wonder whether they will be better or worse off after spending so much on both insurance premiums and cost-sharing. Although excellent care does exist, it is difficult to find, and patients describe choosing a healthcare provider as akin to playing the lottery.⁸⁸

Health *insurance* will never be affordable unless the cost of health *care* is reduced. Yet the methods health insurance plans have typically pursued – cutting provider fees, increasing patient cost-sharing, requiring providers to seek authorization for treatments, etc. – have not only failed to control costs, in many cases they have limited patient access to needed care or reduced the quality of the care patients receive.

There was widespread optimism that Accountable Care Organizations and large integrated delivery systems would lead to higher quality, more affordable care. However, the experience so far with ACOs and other integrated systems has fallen far short of expectations, and there are now growing concerns that many such entities are simply charging higher prices than they had before,

with no significant change in utilization or quality, thereby making care even less affordable.

A radically different approach to healthcare delivery is needed, one that eliminates services that patients don't need and delivers care that will prevent avoidable health problems. The Institute of Medicine's 2011 study *The Healthcare Imperative: Lowering Costs and Improving Outcomes*⁸⁹ found that 30% of healthcare spending could be eliminated without harming patients. However, eliminating that spending means that care will have to be delivered in very different ways than it is today.

B. The Need for Radical Reforms in Healthcare Payment

The single biggest barrier to radical redesign of the healthcare delivery system is the current Fee-for-Service payment system. Most people believe that the problem with Fee-for-Service is a financial incentive to deliver unnecessary services, but the problems with Fee-for-Service go far beyond this. The most important problems with the current Fee-for-Service system are the lack of accountability for the outcomes of care or the total costs of care for individual patients, the financial penalties imposed on providers when they keep patients healthy and avoid unnecessary care, and the failure to pay for many high-value services that could improve outcomes for patients and lower the overall cost of care.

There is widespread consensus that a replacement for Fee-for-Service payment is needed. But most of the "value-based payment" and "value-based purchasing" reforms implemented to date have shown little benefit. Pay-for-Performance (including the Merit-Based Incentive Payment program⁹⁰ in Medicare), Shared Savings, Shared Risk, and Narrow Networks fail to solve any of the problems with Fee-for-Service payment. At the same time, they create new problems for both providers and patients, including heavy administrative burdens and incentives to deny care to patients. Although bundled payments have greater potential to solve some of the problems in Fee-for-Service payment, the problematic designs of most current bundled payment programs have resulted in limited benefits as well as concerns that they may actually be harming patients.⁹¹ Many large provider organizations have promoted Population-Based Payments such as global capitation as the ideal, but Population-Based Payments have even more potential to harm patients, promote consolidation of providers, and result in higher prices than any of the other approaches. The fact that a payment system is *different* does not mean that it is *better*. Resistance by physicians, hospitals, and other providers to implementing these problematic designs has been inappropriately interpreted as an

unwillingness to change, rather than an unwillingness to support a cure that may be worse than the disease.

The country is now at a crossroads. One path is to continue pursuing current approaches to value-based payment, forcing physicians and other providers to take on more financial risk, and hoping for better results than have been seen so far. However, the analyses in this report make it clear that the current approaches are fundamentally flawed. The lack of benefits and the harms that have been inflicted on providers and patients to date are not transitional implementation problems, but inevitable results of the problematic structure of these approaches. The benefits will not improve with more time or by changing the magnitude of the incentives, whereas the harms will likely grow.

A better path is to implement a Patient-Centered Payment system that is specifically designed to solve all of the problems with Fee-for-Service payment while also preserving its strengths. Patient-Centered Payment supports patient-centered care, which is what patients want to receive and what physicians and other providers want to deliver. But unlike current value-based payment models, Patient-Centered Payment also requires the kind of accountability for cost and quality that both patients and purchasers need and that is feasible for providers to accept.

Although a Patient-Centered Payment system represents a radical change for healthcare, its key elements are commonplace in every other industry. The fundamental concept in Patient-Centered Payments is to have healthcare providers deliver the complete set of services needed to address a patient's health problem at a predictable price, with a warranty against defects, and a money-back guarantee for failure to perform as promised. That is exactly what consumers and businesses expect for the other products and services they buy. Moreover, rather than having prices and quality standards determined through government regulation or negotiations with intermediaries, Patient-Centered Payment would allow provider Teams to compete for patients based on both cost and the comprehensiveness of their warranty and refund policies – again, exactly what consumers and businesses in other industries rely on to get the best products and services at the best prices.

If you had a serious, but treatable disease, and the treatment that had been prescribed for you was not only failing to cure the disease, but it was also creating serious side effects, would you continue with the same treatment, or would you look for something different? America's healthcare system is sick, and the value-based payment treatments that have been prescribed so far have failed to correct the problem while creating serious negative side effects for patients, providers, and purchasers. It's time for a different approach. The longer the country delays in changing paths, the more difficult it will be to recover what is being lost.

C. Creating a Bottom-Up Approach to Patient-Centered Payment and Care Delivery

In addition to a radical redesign of healthcare delivery and payment, the country needs a radical redesign in its approach to implementing such changes. Healthcare services are delivered locally, and most services are delivered by locally-owned and operated providers, not by national entities. Many studies have also shown the incredible variation in the way healthcare services are delivered across the country. Much of this variation is unnecessary, and while that creates opportunities for improvement, the opportunities will differ from community to community. However, some of the variation is necessary, and new payment and delivery systems will need to provide flexibility for necessary variations. For example, many approaches to healthcare delivery that work in urban areas do not work in rural communities because of lower population densities, greater travel challenges, and difficulties attracting healthcare providers.

Most of the payment for healthcare services also comes from local sources. Even where large national health insurance plans serve as the payers, most of the actual premium dollars come from the individuals and employers who are located in the community. Medicaid payments are determined at the state level, but a growing number of states are allowing different approaches to payments in different regions of the state. Medicare is the one truly national purchaser/payer, but since a significant proportion of Medicare beneficiaries are enrolled in Medicare Advantage plans, a large proportion of Medicare payments are also controlled locally.

Since all of healthcare delivery and most of healthcare payment is local, and since the structures, problems, and opportunities differ from community to community, it makes no sense to try and create a one-size-fits-all national approach to reform, particularly when radical reforms are needed. National purchasers, including the Centers for Medicare and Medicaid Services (CMS) and national employers, will need to be willing to support different approaches in different communities. Although a single national solution would clearly be easier from the perspective of CMS and other national purchasers, they will likely see far greater benefits far more quickly by encouraging and supporting local innovation, rather than by demanding a uniform approach.

Implementing redesigns in healthcare payment and delivery at the community level, however, requires a mechanism through which all of the stakeholders in the community can work together to implement changes in a coordinated way that will work effectively in that community. Healthcare providers cannot deliver care differently without a better payment system; purchasers and payers cannot implement a better payment system without providers who are able to deliver care differently. Providers need to form Teams in order to redesign entire episodes of care, and patients need to understand the kinds of standards of quality that Teams are planning to meet in order to select the best Teams to meet their needs. As explained in Section VIII, a multi-year transition process will be needed for all of this to be successful.

This will require very different kinds of relationships between payers and providers, between physicians and hospitals, between purchasers and providers, and between providers and patients than exist today. Today, the only interactions many of these stakeholders routinely have with each other are negotiations over prices or compensation, and these often result in hard feelings on one or both sides. As a result, in many communities, there is considerable mistrust that will have to be overcome in order for the stakeholders to collaboratively redesign payment and care delivery and to use win-win-win approaches wherever possible.

Since there is no individual or organization “in charge” of healthcare in any community, a growing number of communities have created non-profit Regional Health Improvement Collaboratives to bring together all of the key stakeholders – providers, payers, purchasers, and pa-

tients – to develop a common vision of how healthcare quality and value should be improved, to design win-win strategies for achieving those improvements, and to help resolve implementation problems in ways that are fair to all stakeholders.⁹² Because Regional Health Improvement Collaboratives do not deliver care, pay for care, or regulate care, they can also serve as trusted, neutral facilitators of discussion among the various stakeholders, and they can provide objective information and analysis to help overcome the lack of trust that can prevent stakeholders from reaching agreement on significant reforms on their own. Consequently, communities that do not have Regional Health Improvement Collaboratives will need to create them, and communities that do have Regional Health Improvement Collaboratives will need to give them the kind of support they need to successfully carry out this multi-year process of radical redesign.

APPENDIX A:

Details of a Patient-Centered Payment System

PAYMENTS FOR PREVENTIVE CARE

1. Monthly Preventive Services Management Payment

- **Selection and Use of Preventive Care Management Team.** An individual would select a team of providers to manage the individual's preventive care. In most cases, it is likely that this Preventive Care Management Team would be the patient's primary care practice, but some patients might use a specialty physician (e.g. a gynecology practice), or two different physician practices might form a partnership to deliver the patient different aspects of preventive care.
- **Structure of Payment.** The Preventive Care Management Team would receive a small Monthly Preventive Services Management Payment to cover the costs of proactively monitoring the patient's preventive care needs and providing assistance to the patient in arranging for the necessary procedures to meet those needs, such as colonoscopies, mammograms, and immunizations. (The payment could potentially come from either the patient or the patient's health insurance plan.)
- **Stratification of Payment Amounts.** The amount of the Monthly Preventive Services Management Payment would be higher for patients with more serious risk factors, since they would likely require more and different types of preventive care services.
- **Accountability for Quality and Outcomes.** The Preventive Care Management Team would be responsible for determining what types of preventive care are appropriate for the individual and contacting the individual to encourage and assist them in obtaining the preventive care. The Preventive Care Management Team would only bill for or accept the Monthly Preventive Services Management Payment if the Team documents that the patient is up to date with all preventive care as of the end of the month or that the patient has explicitly refused the recommended preventive care. (For example, if the patient was due for a mammogram during the month, the Preventive Care Management Team would only receive the Preventive Services Management Payment that month if the patient had received their mammogram, had scheduled a mammogram for a future month, or had specifically refused to have a mammogram.)

2. Procedure-Based Bundled Payment for Appropriate Preventive Services

- **Selection and Use of Preventive Service Team.** When an individual needs an immunization, cancer screening, or other preventive care procedure, that individual would select a Preventive Service Team of providers to deliver the preventive procedure. In some cases, the patient's Preventive Care Management Team (if the patient has selected such a Team) might also serve as the Preventive Service Team and deliver the procedure (e.g., an immunization might be delivered by the primary care practice that is managing the patient's preventive care), but in other cases, the patient would need or want to obtain the procedure from a different team of providers (e.g., a patient who needs a screening colonoscopy would select a Colonoscopy Team). The patient would agree to receive all services related to the preventive procedure from the members of the Preventive Service Team or from other providers chosen by that Team.
- **Structure of Payment.** The Preventive Service Team selected by the patient would receive a Procedure-Based Bundled Payment that is designed to cover all of the services required for the procedure from all of the providers who are involved with the procedure. (For example, for a screening colonoscopy, the payment would cover the services of the endoscopist, the anesthesiologist, the pathologist, and the facility where the procedure was performed).
- **Stratification of Payment Amounts.** A different Procedure-Based Bundled Payment would be paid for different preventive procedures. The amount of the payment would be based on the expected cost to the Preventive Service Team of delivering the procedure in a high-quality way. The Preventive Service Team would also receive a higher amount of payment for the same procedure for patients with specific characteristics that are known to make the procedure more complicated to deliver or that create a higher risk of complications.
- **Accountability for Quality and Outcomes.** The Procedure-Based Bundled Payment would only be paid if the Preventive Service Team documents that appropriateness criteria and quality standards were met when the procedure was performed. The Preventive Service Team would also be responsible for paying for the costs of addressing any preventable complications that occurred as a result of the procedure (e.g., to address any bleeding that occurred as a result of a colonoscopy or an infection at the site of an immunization).
- **Relationship to Preventive Care Management.** The patient would not need to have a Preventive Care Management Team in order for a Preventive Service Team to receive a Procedure-Based Bundled Payment for delivering a preventive service. However, if the patient does have a Preventive Care Management Team, the Preventive Service Team would be required to consult with the Preventive Care Management Team prior to delivering the preventive procedure (to ensure the Preventive Service Team was aware of all relevant information about the patient's health status) and after the procedure was completed (so the Preventive Care Management Team would know that aspect of the patient's preventive care needs had been addressed).

PAYMENTS FOR DIAGNOSIS AND TREATMENT PLANNING

3. Diagnosis and Treatment Planning Episode Payment

- **Selection of Diagnostic Coordinator.** A patient who is experiencing one or more new symptoms and who is uncertain about the causes of the symptoms or the appropriate treatments would select a Diagnostic Coordinator to take charge of determining a diagnosis and developing a treatment plan. In many cases, the Diagnostic Coordinator would be a member of the patient's primary care practice, but the Diagnostic Coordinator could also be a hospital emergency department.
- **Formation and Use of Diagnostic Team.** The Diagnostic Coordinator would be responsible for organizing a Diagnostic Team to ensure that an accurate diagnosis is determined and an appropriate treatment plan is developed through a coordinated effort of all providers who would be involved. For common symptoms and combinations of symptoms, the Diagnostic Coordinator would likely have a Diagnostic Team already organized, including any testing laboratories, imaging facilities, and specialists. For uncommon symptoms, the Diagnostic Coordinator would likely need to assemble a custom Team. The patient would agree to receive all diagnostic and treatment planning services related to the patient's symptoms either from the Diagnostic Coordinator or from other healthcare providers that were chosen by the Diagnostic Coordinator to deliver services needed for an accurate diagnosis.
- **Structure of Payment.** For common symptoms, combinations of symptoms, and diagnoses, the Diagnostic Team would receive a Diagnosis and Treatment Planning Episode Payment that would cover all of the testing, imaging, and consultations needed to determine a diagnosis and treatment plan for the types of symptoms the patient was experiencing.
- **Stratification of Payment Amounts.** There would be different Diagnosis and Treatment Planning Episode Payments for different symptoms, combinations of symptoms, and diagnoses. The amount of the payment for any particular set of symptoms would be based on the expected cost to the Diagnostic Team of carrying out the tasks necessary to determine an accurate diagnosis and to engage in a shared decision-making process with the patient to determine an appropriate treatment plan. The Diagnostic Team would also receive a higher amount of payment if the specific patient being diagnosed had specific characteristics (other than the symptoms) that are known to make diagnosis more complicated.
- **Accountability for Quality.** The Diagnosis and Treatment Planning Episode Payment would only be paid if the Diagnostic Team documents the basis for diagnosis, including documentation that all appropriate steps were taken to assure the accuracy of diagnosis, and if it provides a treatment plan to the patient. If the diagnosis is later determined to be inaccurate, the Diagnostic Team would refund the payment to the patient or the patient's insurer. If the patient had a Preventive Care Management Team and/or a Chronic Care Management Team, the Diagnostic Team would be responsible for coordinating the diagnostic and treatment planning process with the leaders of that other Team.

4. Diagnosis Coordination and Treatment Planning Payment

- **Structure of Payment.** For unusual symptoms and complex combinations of symptoms, the Diagnostic Coordinator would receive a Diagnosis Coordination and Treatment Planning Payment to arrange and manage all of the examinations, testing, and referrals to other providers that are required to accurately determine a diagnosis and to help the patient decide on a course of treatment. The providers of the individual services used in the process of determining a diagnosis and developing a treatment plan would be paid on a fee-for-service basis (or possibly using procedure-based bundled payments, similar to the payments used for preventive services). However, they would only be paid if the service was delivered in response to an order or referral from the Diagnostic Coordinator.
- **Stratification of Payment Amounts.** The Diagnostic Coordinator would receive a higher Diagnosis Coordination and Treatment Planning Payment if the patient had more complex or unusual symptoms or if the patient had specific characteristics (other than the symptoms) that would make diagnosis more complicated.
- **Accountability for Quality.** The Diagnosis Coordination and Treatment Planning Payment would only be paid if the Diagnostic Coordinator documents the basis for diagnosis, including documentation that all appropriate steps were taken to assure the accuracy of diagnosis, and if it provides a treatment plan to the patient. If the diagnosis is later determined to be inaccurate, the Diagnostic Coordinator would refund the payment to the patient or the patient's insurer. If the patient had a Preventive Care Management Team and/or a Chronic Care Management Team, the Diagnostic Coordinator would be responsible for coordinating the diagnostic and treatment planning process with the leaders of that other Team.

PAYMENTS FOR TREATMENT OF ACUTE CONDITIONS

5. Standby Capacity Payment to Support Emergency Services and Other Essential Services

- **Recipients and Purposes of Standby Capacity Payment.** The hospital in the community where an individual resides would receive monthly Standby Capacity Payments for that individual to support the cost of emergency services and other “standby” capacity at the hospital, i.e., the fixed cost of facilities, equipment, and personnel that are needed regardless of actual patient or service volume. In small and rural communities where a hospital does not exist or where there is also an insufficient volume of services to sustain essential ambulatory care services delivered outside of the hospital (e.g., a primary care practice, a laboratory, an imaging center, or a birthing center), a Standby Capacity Payment may also be needed to support the fixed costs of those services.
- **Structure of Payment.** The Standby Capacity Payment would be paid regardless of whether the resident actually experienced an emergency or used the hospital’s standby services, reflecting the fact that the residents of the community gain value by having high-quality emergency and other essential services available if and when they are needed. The Standby Capacity Payment would be paid through the patient’s health insurance. Standby Capacity Payments for lower-income uninsured residents could be made through local tax revenues, and payments for higher-income uninsured residents could be made through voluntary “membership” contributions from the residents.
- **Payment Amounts.** There would be separate Standby Capacity payments for distinct types of services that address different kinds of needs and that may be delivered by different providers, e.g., there would be one Standby Payment for Emergency Department and trauma services, and a separate Standby Capacity Payment for interventional cardiology capacity. The amount of the Standby Capacity Payment would be calculated by determining the estimated cost of supporting the minimum standby capacity needed to serve the residents of the community according to national and local standards, and dividing by the number of insured residents of the community. In urban areas where there are multiple hospitals, the Standby Capacity Payment to each hospital for emergency services would be based on the proportion of the total emergency services for residents that were delivered by that hospital (i.e., if one hospital delivered 60% of the emergency services to residents of the community, it would receive 60% of the emergency services Standby Capacity Payment for each resident).
- **Accountability for Quality.** The hospital or other provider could only receive Standby Capacity Payments if the emergency and other standby services it delivered to patients who needed them met quality standards and achieved good outcomes. If a resident of the community received a service supported by the standby payment that failed to meet the quality standard or achieve the specified outcomes, the hospital or other provider would be required to refund the Standby Capacity Payment for that resident to the resident or the resident’s insurer.
- **Relationship to Acute Condition Episode Payments.** The hospital or other provider would agree that in return for the Standby Capacity Payment, the provider would (a) charge residents of the community less for Acute Condition Episode Payments for emergency conditions and other conditions requiring use of the standby services (e.g., cardiac catheterizations) than it would charge non-residents, and (b) the amounts it would charge the residents for these services would be based primarily on the variable costs of the services (rather than based on an average cost that included the fixed costs).

6. Acute Condition Episode Payment

- **Selection of Acute Condition Treatment Team.** If and when a patient has been determined to have an acute condition that requires treatment, the patient would select an Acute Condition Treatment Team of providers to treat the condition. If a Diagnostic Coordinator helped the patient develop a treatment plan, the Diagnostic Coordinator could assist the patient in selecting an Acute Condition Treatment Team. In emergency situations, the patient or the emergency transport would select a hospital and the Emergency Department (which would also serve as the Diagnostic Coordinator) would choose an Acute Condition Treatment Team on the patient’s behalf.
- **Responsibilities of Acute Condition Treatment Team.** The Acute Condition Treatment Team would be responsible for delivering all of the services needed to resolve the acute condition or achieve whatever outcomes had been determined in advance to be feasible for patients with the condition. If the members of the Team did not deliver all of the necessary services themselves, they would take responsibility for arranging for the delivery of the remaining services from other providers and for coordinating all of the services to achieve the desired outcomes for the patient. The patient would agree to receive all services related to the acute condition from members of the Acute Condition Treatment Team or other providers designated by the Team.
- **Structure of Payment.** The Acute Condition Treatment Team would receive a single bundled Acute Condition Episode Payment that is designed to cover the costs of all of the services required for treatment of the acute condition from all of the providers who are involved with the treatment. This would include the costs of both (a) planned treatments for the acute condition and (b) treatment of complications resulting from the treatment.
- **Stratification of Payment Amounts.** A different amount would be paid for different acute conditions, based on the expected differences in costs of treating the conditions. In addition, a higher amount would be paid for the same condition for patients who have specific characteristics that are known to make treatment significantly more difficult or that make complications much more likely.
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Acute Condition Episode Payment (continued)

- **Adjustments to Payment Amounts.** The amount of the Acute Condition Episode Payment would be defined in advance (based on the specific condition being treated and relevant characteristics of patients) so that patients and payers could compare the amount charged by one Acute Condition Treatment Team to the amounts charged by other Teams. The amount would only be increased after a payment amount has been established if (a) there is an increase in the price of drugs or devices that are required for treatment and no substitutes were available, or (b) there is a significant increase in the price of a service from a provider who was not a member of the team and where no other provider could reasonably provide that service.
- **Relationship to Standby Capacity Payments.** If the treatment required use of facilities, equipment, or personnel that were supported by Standby Capacity Payments, and if the patient was a resident of the service area contributing the Standby Capacity Payments, then the amount of the Acute Condition Episode Payment would be based on the marginal cost of services beyond the fixed costs that were already being supported by the Standby Capacity Payments.
- **Accountability for Quality and Outcomes.** The Acute Condition Treatment Team would only bill for or accept the Acute Treatment Episode Payment for a patient if the Team documented that (1) minimum quality standards were met when the treatment was delivered and (2) the Team either (a) achieved a pre-defined outcome for the patient or (b) documented that the patient had characteristics making it impossible to achieve the outcome. The quality standards and outcome goals could differ for different categories of patients if evidence shows the characteristics used to define the categories significantly affect the way care should be delivered or the outcomes that can be achieved. If the patient had a Preventive Care Management Team and/or a Chronic Care Management Team, the Diagnostic Team would be responsible for coordinating the diagnostic and treatment planning process with the leaders of that other Team.
- **Mechanism for Controlling Cost and Improving Outcomes.** An Acute Condition Treatment Team could agree to accept a lower payment if it felt that it could deliver the necessary care at a lower cost. If the patient chose a Team that charged a lower price, the patient would pay less in cost-sharing. An Acute Condition Treatment Team could also voluntarily commit to delivering better outcomes at a higher price for patients with specific characteristics if it felt it could do so. If the patient's health insurance plan did not cover the higher amount for the improved outcomes, the patient would be permitted to pay the difference between the payment amount associated with the standard outcomes and the payment amount required for the better outcomes.

7. Acute Condition Coordinated Treatment Payments

- **Selection of Acute Condition Treatment Coordinator.** If a patient has an uncommon acute condition, or if a patient has a common condition but has other characteristics that require special approaches for treatment of that condition, and if either (a) there is too little experience in how to treat the condition for patients with those characteristics to reliably define an Acute Condition Treatment Team or the amount of an Acute Condition Episode Payment or (b) there are too few patients with that condition or characteristics in the community to enable any Acute Condition Treatment Team to accept a pre-defined payment amount for treating them, then the patient would select an Acute Condition Treatment Coordinator to manage the treatment process.
- **Structure of Payment.** The Acute Condition Treatment Coordinator would receive a Treatment Coordination Payment to arrange and manage all of the services that are required to effectively treat the patient's condition. The providers of the individual services used for treatment of the condition would be paid on a fee-for-service basis (or possibly using procedure-based bundled payments, similar to the payments used for preventive services). However, they would only be paid if the service was delivered in response to an order or referral from the Acute Condition Treatment Coordinator.
- **Accountability for Quality and Outcomes.** The Acute Condition Treatment Coordinator would only bill for or accept the Acute Treatment Coordination Payment for a patient if the Coordinator documented that minimum quality standards were met in the delivery of individual services.

PAYMENTS FOR MANAGEMENT OF CHRONIC CONDITIONS

8. Bundled Payment for Initial Treatment of Chronic Conditions

- **Selection of Chronic Care Management Team.** If a patient has been newly diagnosed with a chronic condition, or if the patient has not previously received treatment for the condition, the patient would select a team of providers to treat and help the patient manage the condition. The patient would agree to receive all services needed to treat the chronic condition(s) from the members of this Chronic Care Management Team (or from other providers chosen by that Team). A patient with multiple chronic conditions could either select a single Team to help them manage all of their conditions in a coordinated way, or they could select two or more Teams, each of which would take responsibility for treating an individual condition or subgroup of conditions. (The choice would depend on the availability of provider teams who are able and willing to take accountability for treatment of the patient's conditions and on the outcomes those providers would commit to achieve.)
- **Responsibilities of Chronic Care Management Team.** The Chronic Care Management Team would be responsible for delivering initial treatment, education, and self-management support services for a limited period of time in order to determine the most effective treatment for the patient and the most effective way of supporting their care over a longer period of time.
- **Structure of Payment.** The Chronic Care Management Team would receive a one-time Bundled Payment for Initial Treatment; this would either be paid as a single lump sum or as a monthly payment for a fixed period of time. The time period for the services supported by this Bundled Payment for Initial Treatment would depend on the amount of time evidence has shown is needed to determine what treatment and care management services will be most effective for a newly diagnosed and treated patient.
- **Stratification of Payment Amounts.** The amount of the Bundled Payment for Initial Treatment would differ based on the severity of the patient's chronic condition(s) and other characteristics of the patient that affect the costs and outcomes of treatment. However, the amount would not differ depending on the number or types of services delivered.
- **Adjustments to Payment.** The amount of the Bundled Payment for Initial Treatment would be defined in advance (based on the specific chronic condition(s) and other relevant characteristics of patients) so that patients and payers could compare the amount charged by one Chronic Care Management Team to the amounts charged by other Teams. The amount would only be increased after a payment amount has been established if (a) there is an increase in the price of drugs or devices that are required for treatment and no substitutes were available, or (b) there is a significant increase in the price of a service from a provider who was not a member of the team and where no other provider could reasonably provide that service.
- **Accountability for Quality and Outcomes.** The Chronic Care Management Team would only bill for or accept the Bundled Payment for Initial Treatment if the Team documented that (1) minimum quality standards were met in treating and managing the condition and (2) either (a) the Team achieved pre-defined outcomes for the patient or (b) the Team documented that the patient had characteristics making it impossible to achieve the outcomes.

9. Monthly Bundled Payment for Ongoing Management of Chronic Conditions

- **Selection of Chronic Care Management Team.** After the patient has completed the initial period of treatment for a chronic condition, the patient would select a Chronic Care Management Team to provide continued treatment and management. In many cases, this would be the same Team that managed the patient's care during the initial treatment process, but in other cases, the initial Chronic Care Management Team might be led by a specialist in a different city and the patient would then select a local specialist or a primary care provider to manage the patient's ongoing care.
- **Responsibilities of Chronic Care Management Team.** The Chronic Care Management Team would be responsible for delivering ongoing treatment, education, and self-management support services for the patient's chronic disease(s).
- **Structure of Payment.** The Chronic Care Management Team would receive a monthly Bundled Payment for Continued Management of Chronic Conditions to cover the costs of all of the services the patient needed for treatment and management of the condition(s) for which the Team had accepted responsibility. This would include both (a) costs of planned treatments and self-management support for the chronic condition, and (b) the costs of treating avoidable acute exacerbations, such as those that require a hospitalization or intensive outpatient treatment. The Bundled Payment for Continued Management would continue indefinitely, as long as the chronic condition continued to be present and require treatment, but the amount could change from one month to the next as the severity of the condition changed or the patient's other characteristics changed.
- **Stratification of Payment Amounts.** The amount of the Bundled Payment for Continued Management would differ based on the severity of the patient's chronic condition(s) and other characteristics of the patient that affect the costs and outcomes of treatment, but the amount would not differ depending on the number or types of services delivered.

Monthly Bundled Payment for Ongoing Management of Chronic Conditions (continued)

- **Adjustments to Payments.** The amount of the Bundled Payment for Continued Management would be defined in advance (based on the specific chronic condition(s) and other pre-specified characteristics of the patient) so that patients and payers could compare the amount charged by one Chronic Care Management Team to the amounts charged by other Teams. The amount would only be increased after a payment amount has been established if (a) there is an increase in the price of drugs or devices that are required for treatment and no substitutes were available, or (b) there is a significant increase in the price of a service from a provider who was not a member of the team and where no other provider could reasonably provide that service.
- **Accountability for Quality and Outcomes.** The Chronic Care Management Team would only bill for or accept the Bundled Payment for Continued Management if the Team documented that (1) minimum quality standards were met in treating and managing the condition and (2) either (a) the Team achieved pre-defined outcomes for the patient or (b) the Team documented that the patient had characteristics making it impossible to achieve the outcomes. Outcomes would be defined in terms of maintaining the results achieved during the initial treatment period and/or slowing the progression of the disease. Because patients should be less likely to have exacerbations or treatment side effects after they have a stable treatment regimen, the expected outcomes would be different under the Bundled Payment for Continued Management than for the Bundled Payment for Initial Treatment period. The outcome goals would also depend on the length of time that the patient received care from the same team of providers; the providers could only take accountability for longer-term outcomes (e.g., slowing the progression of disease) for patients they cared for over a longer period of time.
- **Mechanism for Controlling Cost and Improving Outcomes.** A Chronic Care Management Team could agree to accept a lower payment if it felt that it could deliver the necessary care at a lower cost. If the patient chose a Team that charged a lower price, the patient would pay less in cost-sharing. A Chronic Care Management Team could voluntarily commit to delivering better outcomes at a higher price for patients with specific characteristics if it felt it could do so. If the patient's health insurance plan did not cover the higher amount for the improved outcomes, the patient would be permitted to pay the difference between the payment amount associated with the standard outcomes and the payment amount required for the better outcomes.
- **Relationship to Acute Condition Episode Payments.** In situations in which an individual who was receiving ongoing treatment and management for a chronic condition could achieve better outcomes by receiving a surgical procedure, this procedure could be paid for by the provider team managing the chronic condition using funds from the monthly Management of a Chronic Condition payment, assuming the patient has been and will continue to be under the management of that team for an extended period of time. Otherwise, the surgical procedure would be classified as treatment for an acute condition and paid for using an Acute Condition Episode Payment.

APPENDIX B:

How Care Would Change Under Patient-Centered Payment

1. Preventive Care

Mr. Jones is a 52 year old healthy man with no significant health problems or risk factors. He has a high-deductible health insurance plan. According to U.S. Preventive Services Task Force recommendations, he should have received a screening colonoscopy at age 50.

Care Delivery and Payment Under Fee-for-Service

Mr. Jones's primary care physician (PCP) is paid each time Mr. Jones comes to the primary care practice office to have a face-to-face visit with the PCP.

Mr. Jones is only willing to visit his primary care physician (PCP) every other year for a routine general physical examination because he feels he is healthy and he is not willing to take the time to see the PCP more frequently. At his physical examination two years ago after he turned 50, his PCP informed Mr. Jones that a man his age should receive a colonoscopy, but Mr. Jones did not do anything in response. Neither the PCP nor anyone else called Mr. Jones after the visit to see if he had scheduled a colonoscopy. The PCP billed Mr. Jones's health insurance for the visit.

At his physical examination this year, the PCP again urged that Mr. Jones obtain a colonoscopy and recommends a gastroenterologist whose office is located in the same building. Mr. Jones stopped in the gastroenterologist's office and scheduled a colonoscopy a month later on a day when he felt he would be able to take time off from work and when his wife could also take time off in order to accompany him to the procedure.

When Mr. Jones scheduled the colonoscopy procedure, the gastroenterologist's office mailed him instructions regarding bowel preparation and a prescription for the bowel preparation materials. Mr. Jones was not aware of the need for the bowel prep and does not follow the instructions accurately.

Mr. Jones arrives on the scheduled date at the outpatient surgery center at the hospital where the

Care Delivery and Payment Under Patient-Centered Payment

Mr. Jones's primary care practice receives a Monthly Preventive Services Management Payment to monitor his preventive care needs. The practice receives the payment each month even if Mr. Jones does not see his PCP, but only if the practice can document that Mr. Jones has received or is scheduled to receive all of the preventive care he needs.

When Mr. Jones turned 50, a staff member in the primary care practice called Mr. Jones to tell him about the importance of colorectal cancer screening and offered to help him arrange for a colonoscopy. She explained the quality standards for colonoscopies and the importance of good bowel preparation to ensure a complete colonoscopy. She further explained that some Colonoscopy Teams accepted a Colonoscopy Bundled Payment that would cover all of the costs of the colonoscopy, including the fees from the endoscopist, the fees from an anesthesiologist and/or pathologist if one was needed, the hospital charge if the procedure was performed in a hospital, and the cost of a repeat procedure if one was needed.⁹³ Moreover, these Colonoscopy Teams offered a quality guarantee along with their prices. She sent him a list of Colonoscopy Teams that accepted Colonoscopy Bundled Payments and the locations where they performed the procedure. Mr. Jones chose the Team that had the best combination of a convenient location and price, and the staff member from the primary care practice got the scheduler from the Colonoscopy Team on the phone to schedule the procedure. Because Mr. Jones had scheduled all of the preventive care he needed, the primary care practice was able to bill Mr. Jones's insurance plan for the Monthly Preventive Services Management Payment for the month.

The Colonoscopy Team that will be performing the procedure has agreed to be accountable for achieving a good outcome in return for the Colonoscopy Bundled Payment. This includes an agreement that if the colonoscopy cannot be completed due to poor bowel preparation, the Team will do a second colonoscopy at no additional charge. In order to avoid this from happening, they have a staff member assigned to contact each patient to ensure they understand what is needed.

gastroenterologist performs procedures. After an anesthesiologist sedates Mr. Jones, the gastroenterologist begins but is unable to complete the colonoscopy. He finds and removes one polyp from the portion of the colon he was able to visualize and sends it to a pathologist for review.

The gastroenterologist tells Mr. Jones that he since he was not able to examine the entire colon, there may be other polyps and Mr. Jones will need to schedule a repeat procedure at a later date.

Mr. Jones begins receiving bills in the mail related to the colonoscopy. He receives a bill from the gastroenterologist for performing the endoscopy itself, a second bill from an anesthesiologist for administering anesthesia before and during the procedure, a third bill from a pathologist who examined the polyp that was removed, and a fourth bill from the hospital where the procedure was performed. The total of all of the bills is over \$3,000. The deductible on Mr. Jones's health insurance plan is \$10,000 deductible, so he is responsible for the full amount of the bills. He had not expected the colonoscopy to cost that much and is unable to pay all of the bills on time

Mr. Jones receives a letter from the gastroenterologist transmitting the pathologist's report, which found that the removed polyp was benign. The letter states that the colonoscopy was incomplete and that a repeat colonoscopy should be performed as soon as possible.

Mr. Jones calls the gastroenterology practice to ask if the second colonoscopy will cost as much as the first one did. The practice says it is unable to predict the total price, but it says that here is no reason to expect that it would cost less. Mr. Jones does not feel he is able to afford another \$3,000 for a second colonoscopy and so he does not schedule it, hoping that there is nothing problematic in the part of his colon that was not examined

Mr. Jones's primary care practice did not receive a copy of the gastroenterologist's letter nor did it receive a copy of the pathology report. The EHR system that practice purchased is unable to receive information electronically from the health system where the gastroenterologist works. No one from the primary care practice calls Mr. Jones to determine whether he had a colonoscopy or what the result was. Although the primary care practice is participating in a pay-for-performance program that uses colonoscopy rates as a quality measure, the

As soon as the colonoscopy procedure is scheduled, a staff member from the gastroenterologist's office calls Mr. Jones to explain the need for good bowel preparation and to review optional approaches he could use. She arranges for him to receive the bowel preparation materials, and she or another staff member calls Mr. Jones when the bowel preparation is to begin to make sure he understands the instructions and plans to follow them. She also gives him a phone number he can call if he has any questions or problems completing the bowel preparation.

Mr. Jones successfully completes the bowel prep and arrives the next morning at the ambulatory surgery center that is part of the Colonoscopy Team. The gastroenterologist uses conscious sedation during the procedure, avoiding the need for an anesthesiologist to be present. The colonoscopy is completed successfully and two polyps are removed, which the gastroenterologist sends to the pathologist on the Colonoscopy Team to review.

Mr. Jones receives a single bill in the mail from the Colonoscopy Team for \$1,200, the exact amount he was told in advance he would need to pay. The Colonoscopy Team is able to charge less than other providers, even with the additional support they provide to the patient, partly because they perform the procedures in a lower-cost but high quality ambulatory surgery center and they have eliminated other inefficiencies without adversely affecting quality, and partly because they attract more patients due to their predictable price and assurance of a good outcome.

Mr. Jones receives a letter from the gastroenterologist on the Colonoscopy Team indicating the polyps that were removed were benign and that he should not need another colonoscopy for 10 years.

Mr. Jones's primary care practice was alerted electronically that the colonoscopy had been completed and a few days later it receives the results of the pathology report electronically. The primary care practice records the fact that Mr. Jones is now up to date on that aspect of his preventive care. Assuming that Mr. Jones has also received all of his other preventive care (e.g., his annual flu shot), the primary care practice can bill for the next month's Preventive Services Management Payment.

practice's rates are already well above average, so there is no positive or negative financial impact on the practice depending on whether Mr. Jones does or doesn't receive a colonoscopy. The staff at the primary care practice are focused on other quality measures and do not have time to call patients or gastroenterology practices to try and track down missing information about colonoscopies.

Mr. Jones does not see his PCP again for two years until he goes to receive a physical examination. During that visit, the PCP asks him if he has had a colonoscopy. Mr. Jones says he had one two years earlier and the results were negative. The PCP tells him that he does not need another colonoscopy for 10 years.

2. Diagnosis and Treatment of an Acute Condition

Mrs. Smith is a 30 year old woman who wants to have a baby. She and her husband are both employed at relatively low wage jobs. Although they each have health insurance through their employers, their insurance plans have high deductibles, so they know that when she gets pregnant, they will likely be facing a large out-of-pocket cost for her maternity care.

Care Delivery and Payment Under Fee-for-Service

Mrs. Smith suspects she is pregnant and she picks up a home pregnancy test at the grocery store, which indicates that she is pregnant. She reads as much as she can on the internet about what kind of prenatal care she needs to receive in order to deliver a healthy baby, and she also reads about the different options for delivery.

Mrs. Smith asks her friends for recommendations on a good obstetrician she could use.

Care Delivery and Payment Under Patient-Centered Payment

Mrs. Smith suspects that she is pregnant and she visits her primary care physician (who leads her Preventive Care Management Team, provides basic gynecologic health services, and serves as her Diagnostic Coordinator when she has health problems). The physician performs a pregnancy test, confirms that she is pregnant, and performs a physical examination. He tells her that she does not appear to have any significant risk factors that would be expected to complicate her pregnancy or delivery. He explains the different options for delivery, including delivery in a birth center vs. a hospital, delivery by a midwife vs. an obstetrician, vaginal delivery vs. Cesarean section, and induced delivery vs. natural birth, and the advantages and disadvantages of each approach. Mrs. Smith indicates that she wants to have natural childbirth rather than a C-section, but she is not sure whether she is willing to give birth in a birth center.

Mrs. Smith's primary care physician helps her to identify Maternity Care Teams that offer the opportunity to give birth in either a birth center or a hospital, and he helps her understand the differences in the standards and outcomes that the different Maternity Care Teams commit to achieve.

Mrs. Smith's primary care physician charges her a Diagnosis and Treatment Planning Payment that covers the full cost of the pregnancy test, the examination, the diagnosis, and the assistance provided in selecting a Maternity Care Team.

Mrs. Smith schedules an appointment with one of the obstetricians in the community who was recommended to her. The obstetrician examines her and tells her that she does not have any risk factors that would be expected to complicate her pregnancy.

Mrs. Smith tells the obstetrician that she and her husband have limited incomes and high-deductible health plans, so she wants to make sure that she chooses healthcare providers who will charge an amount she can afford to pay. The obstetrician tells her what he charges for a normal vaginal delivery and says that price includes both the delivery and all of her prenatal care visits. However, he says the hospital is paid separately and he does not know what the hospital will charge. He says he only delivers babies at the large medical center in the community, and Mrs. Smith knows from experience that the hospital charges high prices for services performed there. The obstetrician says that if complications arise during the delivery or afterwards, there may be additional charges to treat them. She asks how often the women he cares for have experienced complications; he tells her that the complication rate is low but he does not have detailed statistics to give her. Mrs. Smith is not comfortable selecting the obstetrician for her care, so she pays the practice its visit fee and leaves.

Mrs. Smith schedules an appointment with a different obstetrician who was also recommended to her by a friend. He examines her and gives her information similar to what she received from the first obstetrician. He is also not able to provide any estimate for the total amount she will need to pay for the delivery, but since he performs deliveries at a smaller hospital that charges lower prices, she assumes that the total cost will be lower what she would have paid if she had used the first obstetrician.

Mrs. Smith tentatively selects one of the Maternity Care Teams based on a combination of the prices the Team charges for delivery compared to other Teams and also because of the high standards and good outcomes of care that the Team commits to achieve for low-risk mothers in return for their payment. The Maternity Care Team consists of several obstetricians and midwives, a birth center, and a hospital, so it offers the kind of options for giving birth that Mrs. Smith is considering.

Mrs. Smith visits the Maternity Care Team to decide whether to choose them to help her with her pregnancy. During her visit, Mrs. Smith is given an opportunity to meet several of the obstetricians and she is asked to choose the obstetrician whom she feels most comfortable with to serve as the Team Lead if she decides to select the Maternity Care Team to provide her care. At no charge to Mrs. Smith, the Team Lead performs a thorough physical exam, and confirms that Mrs. Smith does not have any risk factors that would be expected to complicate her pregnancy.

The Team Lead tells Mrs. Smith that because of her good risk profile, she has two options for giving birth. In the first option, she would plan for giving birth in the birth center, but still be able to have her baby in the hospital if any issues develop during or prior to giving birth that make the hospital more appropriate. In the second option, she would choose to give birth in the hospital. The Team commits to the same good birth outcomes in either case, but it charges a higher amount for the second option. The Team Lead tells Mrs. Smith that it does not perform elective inductions under either option, and it only performs C-Sections when they are medically necessary. The Team Lead explains that regardless of where she gives birth, the Team uses midwives to help low-risk mothers with natural childbirth, but the Team Lead will be involved throughout the pregnancy and while she is giving birth. The Team Lead gives Mrs. Smith detailed statistics showing the Team's low rate of complications over the past several years for women in her risk category, and she also gives Mrs. Smith the results of independent surveys of the Team's patients showing that women had high rates of satisfaction with the care they received from the Team.

In both options, the Team will charge Mrs. Smith a single Maternity Care Episode Payment. This is a fixed amount that will cover (1) all of Mrs. Smith's prenatal care, regardless of how many prenatal care visits she needs, (2) the costs of giving birth, even if it turns out that she should need a Cesarean Section or other procedure, and (3) 60 days of post-partum care. The amount will be lower if Mrs. Smith decides to pursue giving birth in the birth center, but if she chooses that option and it turns out that she needs hospital care during the delivery, she will be able to give birth in the hospital at no extra charge. This is because the price of the Maternity Care Episode Payment includes an amount designed to cover the costs of hospital care for the small proportion of women who need it. The Team Lead assures Mrs. Smith that because the payment is contingent on good outcomes, she does not need to worry that the Team will force her to give birth in the birth center if it is not safe to do so.

Rather than continuing to pay for office visits in order to pick an obstetrician, Mrs. Smith decides to select the second obstetrician to provide her care.

The obstetrician gives Mrs. Smith a set of standardized prenatal care instruction forms and encourages her to read them carefully and call the office if she has any questions. He tells her that he wants to see her for regular prenatal care visits over the course of her pregnancy and asks her to schedule appointments with his receptionist.

The obstetrician chosen by Mrs. Smith only schedules prenatal care visits during normal weekday working hours, which means that Mrs. Smith will have to take time off of work to make the appointments. She has to miss several of her appointments because they turned out to be days that she could not leave her job and the obstetric practice did not have any alternative appointment openings she could use instead.

As Mrs. Smith's due date approaches, her obstetrician tells her that he will be out of town during the week she is scheduled to deliver, and he tells her that another physician in the practice will perform the delivery for her. Mrs. Smith is uncomfortable having her baby delivered by another physician that she hasn't met, so she asks her obstetrician if she can schedule her delivery before he leaves town. Her obstetrician says that he feels he could safely induce delivery the day before he leaves. Even though that would be a week earlier than her expected delivery date, national and hospital guidelines permit elective deliveries at 39 weeks. Mrs. Smith

Mrs. Smith agrees to use the Maternity Care Team for her care, with the obstetrician who examined her serving as the Team Lead. Mrs. Smith visits the birth center and decides that she would like to have her baby there. She also meets the midwives who work on the Team and selects one to help her during childbirth. The Team Lead introduces Mrs. Smith to another obstetrician on the Team who will serve as the Team Lead's primary backup in case she is unavailable to be present when Mrs. Smith is giving birth. The Team Lead says that the backup obstetrician will come to some of Mrs. Smith's prenatal care visits so he will also be familiar with her needs and wishes.

The Team Lead works with Mrs. Smith to develop a personalized prenatal care and birth plan that will achieve the best possible outcome for her pregnancy. Since Mrs. Smith is a first-time mother, the plan includes free classes organized by the Maternity Care Team about childbirth and caring for newborns. The Team Lead reviews all aspects of the plan with Mrs. Smith to make sure they are feasible for her to follow. Mrs. Smith is asked to sign an agreement indicating that she agrees to follow the prenatal care plan and that the Maternity Care Team commits to achieving a specific standard of care and specific outcomes. The agreement indicates that Mrs. Smith will not have to pay for the services she receives if the Team fails to meet its commitments.

Since the Maternity Care Team's payment is dependent on achieving a good outcome for each patient, the Team maintains evening and weekend hours for working parents. The Team also assigns a staff member to monitor Mrs. Smith's care. The staff member makes sure Mrs. Smith has prenatal care visits scheduled at times that are convenient for her, contacts her before visits to encourage her to keep the appointments, and contacts her after the visits to provide any help she needs in following up on any issues that were identified during her visit and in carrying out any other aspects of her prenatal care plan. The Team is able to pay for this support because the bundled Maternity Care Episode Payment gives the Team a flexible pool of money to use for services that will improve outcomes.

As promised, the backup obstetrician attends several of Mrs. Smith's prenatal care visits and Mrs. Smith feels comfortable having either of the obstetricians involved with her delivery.

As Mrs. Smith's due date approaches, she becomes anxious about the health of the baby and the possibility of complications during delivery because some friends have told her that having a baby in a birth center is unsafe. She contacts the Maternity Care Team Lead to ask about scheduling an elective Cesarean Section. The Team Lead and the midwife explain how a C-Section creates risks for both Mrs. Smith and her baby, and they assure her that everything is progressing well. They also explain the advantages of giving birth in the birth center, the procedures they have in place for dealing with complications that may occur, and they show her the statistics they maintain on the outcomes they have

<p>agrees to have an elective delivery, and she is scheduled for an admission to the hospital on that date.</p>	<p>achieved for other women with similar characteristics. They assure her that if any complications arise that warrant her having a hospital delivery or a C-Section, they will admit her to the hospital and perform the procedure. Mrs. Smith agrees to continue with the plan to have her baby at the birth center.</p>
<p>Mrs. Smith comes to the hospital on the date that was scheduled for her elective delivery, and her obstetrician administers drugs designed to induce labor.</p> <p>After several hours of contractions, the obstetrician tells Mrs. Smith that her baby is showing signs of distress, and he recommends performing a Cesarean Section. Although Mrs. Smith would prefer a normal vaginal delivery, she is concerned about the baby's health and she agrees.</p> <p>The obstetrician performs the C-Section and delivers a healthy baby. Mrs. Smith has to stay in the hospital for 3 days in order to recover from the C-Section before going home with her baby.</p>	<p>The staff from the Maternity Care Team stay in frequent contact with Mrs. Smith as her due date approaches to help her decide when she should come to the birth center, and they tell her they can provide transportation for her if necessary.</p> <p>At 41 weeks of pregnancy, Mrs. Smith begins having contractions and she goes to the birth center. The Team Lead examines her there and says she should expect a normal delivery. Her midwife assists her throughout her labor.</p> <p>Mrs. Smith gives birth to a healthy baby at the birth center with no complications. Afterward, the Team Lead examines Mrs. Smith and her baby and determines that she is able to go home with her baby the same day.</p>
<p>Two days after going home, Mrs. Smith develops signs of an infection around the incision where her C-Section was performed. She goes to the emergency room and is admitted to the hospital for two additional days before returning home again.</p> <p>Mrs. Smith has a post-partum visit with her obstetrician 2 weeks after she returns home to check that her incision is now healing properly and that she is having no other problems.</p>	<p>Since the standards of care and outcomes that the Maternity Care Team has committed to meet include any complications that arise up to 60 days after delivery, the Team stays actively involved with Mrs. Smith's care after she gives birth. A nurse from the Maternity Care Team visits her at her home the day after the birth to make sure she is not having any problems and to answer any questions she has about taking care of her newborn.</p> <p>During the home visit, the nurse schedules Mrs. Smith for a post-partum visit with the Team Lead at a time that is convenient for her and her husband.</p> <p>In addition to the post-partum visit, the nurse or another staff member from the Maternity Care Team contact Mrs. Smith by phone several times during the month to make sure everything is still progressing well, and if they identify any problems, they take any immediate actions to resolve them.</p>
<p>Within a few days after delivery of her baby, Mrs. Smith begins receiving a series of bills:</p> <ul style="list-style-type: none"> • Her obstetrician bills her for performing the C-Section; • The hospital where the C-section was performed bills her for the procedure; • An anesthesiologist bills her for administering the spinal block during her C-section; • The hospital bills her for the readmission to treat her infection; and • A hospitalist bills her for treating her surgical site infection. <p>The total cost of the delivery is much higher than Mrs. Smith had expected because of the much higher hospital charge for a C-Section instead of a vaginal delivery, because of the readmission to the hospital to treat the surgical site infection, and because of the fees from the anesthesiologist and hospitalist.</p>	<p>After the end of the post-partum period, Mrs. Smith receives a single bill from the Maternity Care Team for all of the care she received. The amount of the bill is exactly the amount of the Maternity Care Episode Payment that Mrs. Smith was told she would be charged when she selected the Maternity Care Team for her care.</p>

3. Diagnosis and Management of a Chronic Condition

Mr. Roberts is a 60 year old man who smoked cigarettes for most of his adult years, but quit smoking 5 years ago because he was concerned about developing lung cancer. Since he has always considered himself to be in good health, he does not see a primary care physician regularly. Over the past year, he has often been short of breath during even mildly strenuous activities, and he has also developed a chronic cough.

Mr. Roberts develops a bad cold and he wakes up during the night with difficulty breathing. His wife takes him to the local hospital emergency department.

Care Delivery and Payment Under Fee-for-Service

There are no current medical records available for Mr. Roberts because he has no primary care physician, so after performing tests to rule out immediate life-threatening heart or lung problems, the emergency physician admits him to the hospital for testing and treatment.

A hospitalist examines Mr. Roberts and asks a cardiologist and a pulmonologist to also examine him. The physicians agree that he has COPD and he is given breathing treatments during a 3-day stay in the hospital.

Mr. Roberts is discharged to his home with prescriptions for two inhalers – a long-acting bronchodilator and a short-acting “rescue” inhaler.

The emergency physician, hospitalist, cardiologist, and pulmonologist all submit bills for the visits they had with Mr. Roberts in the ED and in the hospital, and the hospital submits a large bill for the inpatient stay. The emergency physician is paid a small amount to assess and stabilize Mr. Roberts in the emergency department, and the other physicians are paid small amounts for their consultations; most of the total payment goes to the hospital for the inpatient stay.

Care Delivery and Payment Under Patient-Centered Payment

There are no current medical records available for Mr. Roberts because he has no primary care physician, so after quickly performing tests to rule out immediate life-threatening heart or lung problems, the emergency physician conducts a detailed history and physical. The emergency physician follows a testing protocol designed to quickly and efficiently determine whether Mr. Roberts has pneumonia, asthma, COPD, acute bronchitis, or another health problem, and the physician determines that Mr. Roberts most likely has COPD. The emergency physician determines that if Mr. Roberts responds well to a breathing treatment, he would not need to be admitted to the hospital, so Mr. Roberts receives a breathing treatment in an observation unit next to the emergency department, the treatment alleviates his symptoms, and he is able to return home the same day.

The emergency physician explains the diagnosis and initial treatment to Mr. Roberts and his wife, and a nurse then spends additional time with them to explain COPD in more detail, how it is likely to progress, and how medications can help Mr. Roberts continue to lead an active life while avoiding another exacerbation like the one that brought him to the ED. The nurse gives Mr. Roberts a list of several pulmonology and primary care practices in the community that serve as Chronic Care Management Teams for COPD, along with the prices those practices charge and an indication as to whether the practices guarantee the quality of their care. The same list with the same information is available to anyone on the internet, and it includes physician practices that are not affiliated with the hospital that operates the ED as well as practices that are affiliated. The nurse urges Mr. Roberts to choose one of the physician practices and schedule an appointment with them as soon as possible.

After Mr. Roberts completes the breathing treatment, he is discharged. The emergency physician gives Mr. Roberts a limited-dose generic inhaler he can use if needs it until he sees the Chronic Care Management Team. The nurse gives Mr. Roberts a phone number to call if he has questions or problems after he returns home. A staff member in the ED calls Mr. Roberts the next day to ensure that he is feeling better. The ED staff member also reminds Mr. Roberts of the need to choose a Chronic Care Management Team and offers to make an appointment for him with any of the Teams if he wants.

The emergency physician and hospital receive a Diagnosis and Treatment Planning Episode Payment that covers the examination, all of the testing to diagnose Mr. Roberts' breathing difficulties, and the time spent in explaining the diagnosis and the treatments available. The physician and hospital also receive a single, bundled Acute Condition Episode Payment for the breathing treatment. The amount of the payment is the same regardless of where the treatment is given. (If Mr. Roberts had to return to the ED because the treatment failed to address his symptoms, that return visit would also be covered by the Acute Condition Episode Payment, i.e., the emergency physician and hospital would not receive any additional payments for a return visit for the same symptoms that led to the initial visit.) The hospital had already received Standby Capacity Payments for Mr. Roberts and other individuals living in the community to support the basic fixed costs of the emergency department and staff, which enables lower prices for the Diagnosis and Treatment Planning Episode Payment and Acute Condition Episode Payment. The total of all three of these payments is much less than the cost of a hospital admission for COPD.

Mr. Roberts goes to his local pharmacy and is surprised to find out how much the inhalers prescribed by the hospital physician will cost. The pharmacist explains that the long-acting bronchodilator is intended to prevent breathing problems from occurring, whereas the short-acting medication is intended to relieve breathing problems when they occur. Mr. Roberts decides to fill only the prescription for the short-acting bronchodilator so that he can get immediate relief when he has a problem, while avoiding the additional expense for the long-acting bronchodilator.

A week later, Mr. Roberts is still having congestion and other symptoms from his cold. He helps a friend put some boxes in the attic of the friend's house, and he suddenly has serious difficulty breathing. He does not have his rescue inhaler with him. The friend calls the paramedics who take him to a different emergency department. The emergency physician there has no records on Mr. Roberts' prior diagnoses or care, and the physician is concerned when Mr. Roberts tells her that he was just discharged from another hospital a week earlier, so she admits him to the hospital for further evaluation and treatment. The hospitalist and other physicians in the hospital conclude that Mr. Roberts has COPD and that he experienced shortness of breath because he was not using the medications that had been prescribed. After another 3-day stay with breathing treatments, they discharge him to home, urging him to fill and use his prescriptions and also urging him to find a PCP to help him manage his COPD.

The hospital where Mr. Roberts was readmitted submits a large bill for the hospital readmission, and the physicians at the hospital who saw Mr. Robert in the ED and the inpatient unit also bill for their services.

Mr. Roberts selects one of the Chronic Care Management Teams from the list he received from the ED nurse, and schedules an appointment. The Team maintains open slots on its schedule for new patients, so Mr. Roberts is seen the same week. The Team has access to the results of the tests performed in the ED, and since Mr. Roberts is no longer experiencing an acute exacerbation, a member of the Team performs spirometry. A pulmonologist on the Team confirms that Mr. Roberts has COPD and categorizes it as moderate severity. The pulmonologist prescribes a long-acting bronchodilator and a short-acting "rescue" inhaler. A care manager on the Team provides Mr. Roberts with additional education about COPD and about the medications, and she demonstrates the proper way to use the inhalers that the physician has prescribed. The care manager works with Mr. Rogers to develop a "COPD Action Plan" describing what he needs to do to effectively manage his condition, and particularly what to do if he experiences shortness of breath. The care manager emphasizes to Mr. Roberts that he should call the Team for assistance as soon as he experiences problems rather than waiting to see if the symptoms will improve on their own, and she gives him a special phone number to call when he is having a problem. Another member of the Team explains the cost of the medications the physician prescribed, determines that Mr. Roberts may have difficulty affording the cost, and helps Mr. Roberts apply to the pharmaceutical manufacturers and other programs for financial assistance.

After the appointment, the care manager contacts Mr. Roberts to verify that he was able to obtain the prescribed medications and answers any questions he has. She schedules a follow-up appointment with the pulmonologist one month later.

Mr. Roberts fills both of the prescriptions and tries to use the inhalers, but finds them difficult to use. Despite what the physician told him, he's skeptical about the benefit he's getting from the long-acting bronchodilator, and so in months when he's short on money, he only gets the short-acting prescription refilled.

When it comes time to get a new prescription, Mr. Roberts tries to find a primary care physician and has difficulty getting an appointment. While he is waiting, he has no medications, and as a result he has problems breathing and has to go to the Emergency Department. The emergency physician gives him a new prescription so he can get it filled as soon as he goes home.

The hospital and the emergency physician are each paid for the second ED visit.

Mr. Roberts finally sees a PCP. The PCP encourages Mr. Rogers to use the inhalers, tells him to call the practice when he needs a refill, and recommends that he come in for a visit every 3 months.

Mr. Roberts does not schedule follow-up visits with the PCP. Several months later, he again has trouble breathing and goes to the ED. After visiting the ED, he schedules an appointment with his PCP, who prescribes a different inhaler for him to use.

The PCP is paid a small amount for each visit with Mr. Roberts. There is no payment to support follow-up calls with Mr. Roberts to determine whether he is having problems, and the PCP is paid regardless of whether Mr. Roberts has problems or not.

At the follow-up appointment, the pulmonologist checks that Mr. Roberts is using his inhalers properly, and determines that he is not having any adverse side effects. The pulmonologist tells Mr. Roberts he has successfully completed the initial phase of treatment, but cautions him not to assume that because he is doing well, he no longer needs to take the medications. The pulmonologist explains that Mr. Roberts will need to continue with medications for the rest of his life in order to avoid hospitalizations and to slow the progression of the disease.

The pulmonologist recommends that Mr. Roberts receive ongoing care for his COPD from a primary care physician because Mr. Roberts needs good preventive care as well as care for his COPD. He gives Mr. Roberts the names of several PCPs who offer care management for COPD patients and who also utilize the pulmonologist in a consulting role so that Mr. Roberts will still have support from the same specialist that he has already developed a relationship with.

The COPD Chronic Care Management Team, which includes the pulmonologist and care manager, bill the insurance plan for a Bundled Payment for Initial Treatment of COPD for the initial month of care they provided to Mr. Roberts, certifying that the services they provided met the standards for good care of COPD. The amount of the Bundled Payment is based on the fact that Mr. Roberts had moderate severity COPD with no other significant health problems. Since Mr. Roberts had no ED visits or hospital admissions, the Team receives the full amount of payment.

Mr. Roberts chooses one of the primary care physicians suggested by the pulmonologist. The primary care physician agrees to serve as both the new lead for Mr. Roberts' COPD Chronic Care Management Team and also to lead his Preventive Care Management Team. The primary care physician and a care manager confirm with Mr. Rogers that he is committed to continue following the COPD Action Plan that had been developed for him.

The primary care practice bills Mr. Roberts' insurance plan each month for both a Monthly Bundled Payment for Continued Management of COPD and a Monthly Preventive Services Management Payment, with the amounts of those payments based on factors such as the stage of COPD and health risk factors such as Mr. Roberts' age and weight. The primary care practice is accountable for ensuring that Mr. Roberts receives good preventive care and that he is taking the appropriate medications for his COPD, and the practice is also accountable for responding quickly when he has any problems, since the practice will be responsible for the cost of an ED visit or hospitalization if he has to go to the ED for an exacerbation of his COPD.

Since COPD is a progressive disease, Mr. Roberts' COPD becomes more severe over time. He periodically has frightening episodes when he has serious trouble breathing, and he goes to the ED when that happens. Several of the ED visits have resulted in hospital admissions, and each time he is prescribed new or additional medications to take. The hospital and the physicians who work there are all paid each time Mr. Roberts comes to the ED and is admitted to the hospital.

Ultimately, Mr. Roberts' COPD becomes very severe, and his frequent hospitalizations have caused other health problems. Despite taking many medications, he makes frequent trips to the Emergency Department and has lengthy hospital stays each time. The hospital and physicians are paid for each of these visits and admissions.

During a lengthy hospital stay following a particularly severe episode, a social worker suggests that Mr. Roberts consider hospice care. Mr. Roberts angrily refuses.

Mr. Roberts continues to have more frequent exacerbations, trips to the ED, and hospitalizations. During one of those episodes, he dies while he was in the hospital.

Since COPD is a progressive disease, Mr. Roberts' COPD becomes more severe over time. A member of the Chronic Care Management Team measures his pulmonary function regularly so that the physician can adjust his medications appropriately. Each time that Mr. Roberts' medications are changed, the care manager makes sure that he can afford to take the medications, that he understands how to use them properly, and that he is not having any problematic side effects. The care manager also contacts Mr. Roberts more frequently, including a periodic home visit, to identify any issues that might cause him to have exacerbations of his disease and to find ways of addressing those issues.

The Chronic Care Management Team continues billing for the Monthly Bundled Payment for Continued Management of COPD, but the amount of the payment increases as the severity of the COPD increases, reflecting the need for the Team to spend additional time with him because he is at higher risk of problems.

Ultimately, Mr. Roberts' COPD becomes very severe, and even with medication, his activities are very limited and he is increasingly uncomfortable due to his difficulty in breathing. His primary care physician introduces Mr. Roberts to a palliative care physician, who then arranges for some additional support for Mr. Roberts and his wife from a nurse and social worker with special training in palliative care.

Because of the severity of Mr. Roberts's COPD, the Chronic Care Management Team receives a higher Monthly Bundled Payment for his care, and the Team uses part of the money from that payment to contract with the palliative care physician to provide home-based palliative care support for Mr. Roberts in addition to the medication management provided by the primary care practice.

The palliative care providers help Mr. Roberts understand that he likely does not have long to live and helps him define his preferences regarding end-of-life care. Mr. Roberts decides that hospice care would be desirable, and since the palliative care providers he has been seeing also provide hospice care, the transition for Mr. Roberts is seamless.

Mr. Roberts dies peacefully at home, surrounded by his family, with a member of the hospice care team there to make him as comfortable as possible and provide assistance to his family.

APPENDIX C:

How Patient-Centered Payment Can Benefit Patients, Providers, and Payers

To understand how Patient-Centered Payments could be a “win-win-win” for physicians, hospitals, and payers as well as patients, the following sections describe two hypothetical situations:

- an acute condition for which the physician and the patient have the choice of treating the condition by either performing a procedure or prescribing a medication.
- a patient with a chronic condition in which better management can prevent exacerbations severe enough to require hospitalization of the patient.

A. Acute Condition Episode Payment

Assume that a physician practice regularly sees patients who have a particular acute health condition. There are two options for treating the condition – one option is treating the patients with medication; the other option is an interventional procedure that the physician performs in the hospital. Assume that on average, the physicians currently perform the procedure on 70% of the patients they see.

Figure A-1 shows what current spending might look like for these types of patients, assuming that:

- each physician sees 300 patients per year with the condition;
- the physician is paid \$100 for the office visit to evaluate the patient;
- the physician is paid \$600 for performing each procedure;
- the hospital is paid \$7,000 when the physician performs the procedure;
- the medication for treating patients who do not receive the procedure costs the patients’ health insurance plans \$50 per month. (For simplicity, patient cost-sharing for all services is ignored in this example.)

FIGURE A-1

	CURRENT – FFS		
	\$ Per Service	Patients	Total \$
Physician Services			
Evaluations	\$100	300	\$30,000
Procedures	\$600	210	\$126,000
Subtotal			\$156,000
Medications	\$600	90	\$54,000
Hospital Services	\$7,000	210	\$1,470,000
Total Revenue/Payment		300	\$1,680,000

Now assume further that a study has found that for 10% of the patients who are currently receiving the procedure, the procedure is of marginal benefit to the patient or the benefits do not outweigh the risks, and the patients would be better served with medication therapy.

Figure A-2 shows that under the current Fee-for-Service system, if the physician does 10% fewer procedures (or if a health plan institutes a prior authorization system to try and force a reduction in procedures), the health plan will save 9% (the savings is less than 10% since the patients who don’t receive the procedure now receive medication instead), the physician’s revenue for these patients will decrease by 8% (the physician is still paid for assessing the patients and prescribing treatment, but revenue from procedures is 10% lower), and the hospital’s revenues will be reduced by 10% for this group of patients. The loss of revenues for the physician could make it difficult for the physician to cover the fixed costs of the physician practice, and the loss of revenues for the hospital would make it more difficult for the hospital to cover its fixed costs.

FIGURE A-2

	CURRENT – FFS			FEWER PROCEDURES – FFS			% Change
	\$ Per Service	Patients	Total \$	\$ Per Service	Patients	Total \$	
Physician Services							
Evaluations	\$100	300	\$30,000	\$100	300	\$30,000	
Procedures	\$600	210	\$126,000	\$600	189	\$113,400	
Subtotal			\$156,000			\$143,400	-8%
Medications	\$600	90	\$54,000		111	\$66,600	+23%
Hospital Services	\$7,000	210	\$1,470,000	\$7,000	189	\$1,323,000	-10%
Total Revenue/Payment		300	\$1,680,000		300	\$1,545,600	-8%

Now, assume that instead of paying the physician for office visits and procedures, the physician is given the same payment for each patient who has the condition, regardless of the treatment used. Currently, the health plan is paying the physician practice an average of \$520 for each patient who has the condition, considering the payments for both the office visits and the procedures. As shown in Figure A-3, if the physician receives a payment of that amount for each patient instead of fees for office visits or procedures, the physician would receive the same revenue as under the Fee-for-Service system for the same total number of patients even if fewer procedures are performed, enabling the physician practice to continue covering its costs. The health plan still saves money because most of the spending on the patients wasn't going to the physician, it was being paid to the hospital for the procedures. With 10% fewer procedures, even with no change in the physician's revenue, the health plan would still save 8%.

FIGURE A-3

	CURRENT – FFS			MODIFIED FFS			% Change
	\$ Per Service	Patients	Total \$	\$ Per Service	Patients	Total \$	
Physician Services							
Evaluations	\$100	300	\$30,000		300		
Procedures	\$600	210	\$126,000		189		
Subtotal			\$156,000	\$520	300	\$156,000	0%
Medications	\$600	90	\$54,000		111	\$66,600	+23%
Hospital Services	\$7,000	210	\$1,470,000	\$7,000	189	\$1,323,000	-10%
Total Revenue/Payment		300	\$1,680,000		300	\$1,545,600	-8%

Although this condition-based payment for the physician would avoid financial losses for the physician, the hospital would still lose 10% of its revenue. However, the true impact on the hospital is determined by the change in the contribution margin it generates on the procedures, not the change in gross revenue. If the hospital does 10% fewer procedures, its margin will decrease by more than 10% because it will continue to have significant fixed costs to cover (e.g., the debt on the space where the procedures are performed, the lease on the equipment, etc.) regardless of how many procedures it performs. Figure A-4 shows that if 50% of the revenue the hospital is currently receiving is used to pay for fixed costs, and if the hospital performs 10% fewer procedures, its costs will decrease by less than 10%, at least in the short run. The hospital's variable costs will decrease by 10%; these are the medications and any medical devices used during the procedure (a cardiac stent, a joint implant, etc.), and possibly some of the nursing and other staff time involved in caring for patient during and after the procedure. The result is a very large financial loss for the hospital.

FIGURE A-4

	CURRENT – FFS			MODIFIED FFS			% Change
	\$ Per Service	Patients	Total \$	\$ Per Service	Patients	Total \$	
Physician Services							
Evaluations	\$100	300	\$30,000		300		
Procedures	\$600	210	\$126,000		189		
Subtotal			\$156,000	\$520	300	\$156,000	0%
Medications	\$600	90	\$54,000		111	\$66,600	+23%
Hospital Services							
Fixed Costs (50%)	\$3,500		\$735,000			\$735,000	0%
Variable Costs (45%)	\$3,150	210	\$661,500	\$3,150		\$595,350	-10%
Margin (5%)	\$350		\$73,500			(\$7,350)	-110%
Subtotal	\$7,000	210	\$1,470,000	\$7,000	189	\$1,323,000	-10%
Total Revenue/Payment		300	\$1,680,000		300	\$1,545,600	-6%

Figure A-5 shows that if the hospital were paid more per procedure than it is paid currently, the payer could still save money while preserving the hospital's contribution margin on the procedures and covering its fixed costs. However, the payer would be unwilling to increase the hospital's payment per procedure without an assurance that fewer procedures would be delivered, and the hospital would be unwilling to reduce the number of procedures without a commitment to increase the payment per procedure.

FIGURE A-5

	CURRENT – FFS			MODIFIED FFS			% Change
	\$ Per Service	Patients	Total \$	\$ Per Service	Patients	Total \$	
Physician Services							
Evaluations	\$100	300	\$30,000		300		
Procedures	\$600	210	\$126,000		189		
Subtotal			\$156,000	\$520	300	\$156,000	0%
Medications	\$600	90	\$54,000		111	\$66,600	+23%
Hospital Services							
Fixed Costs (50%)	\$3,500		\$735,000			\$735,000	0%
Variable Costs (45%)	\$3,150	210	\$661,500	\$3,150		\$595,350	-10%
Margin (5%)	\$350		\$73,500			\$73,500	0%
Subtotal	\$7,000	210	\$1,470,000	\$7,428	189	\$1,403,850	-5%
Total Revenue/Payment		300	\$1,680,000		300	\$1,626,450	-3%

A solution is to stop paying both the hospital and the physician for procedures, and to instead pay both as a team using an Acute Condition Episode Payment. Currently, the payer is spending, on average, a total of \$5,600 per patient for each of the 300 patients who have the condition that is being treated. If, as shown in Figure A-6, the physician and hospital agree to manage the care of those 300 patients for an Acute Condition Episode Payment of \$5,460, or 2.5% less than is being spent today, the physicians and hospital can take the \$1,638,000 they would receive for the 300 patients (\$5460 x 300) and allocate it to cover the costs that the physician and hospital would incur to deliver the best combination of procedures or medications to the patients. The physician could make 6% more than today, the hospital's margin could increase by 3%, and the payer would still save 2.5%, with the patients getting the most appropriate services to address their health needs.

FIGURE A-6

	CURRENT – FFS			CONDITION-BASED PAYMENT			% Change
	\$ Per Service	Patients	Total \$	\$ Per Patient	Patients	Total \$	
Physician Services							
Evaluations	\$100	300	\$30,000		300		
Procedures	\$600	210	\$126,000		189		
Subtotal			\$156,000		300	\$165,345	+6%
Medications	\$600	90	\$54,000		111	\$66,600	+23%
Hospital Services							
Fixed Costs (50%)	\$3,500		\$735,000			\$735,000	0%
Variable Costs (45%)	\$3,150	210	\$661,500			\$595,350	-10%
Margin (5%)	\$350		\$73,500			\$75,705	+3%
Subtotal	\$7,000	210	\$1,470,000		189	\$1,406,055	-4.4%
Total Revenue/Payment	\$5,600	300	\$1,680,000	\$5,460	300	\$1,638,000	-2.5%

Acuity Adjustment of the Acute Condition Episode Payment

If there were two (or more) subgroups of patients with different characteristics such that one subgroup needed the procedure consistently more frequently than the others, then separate Acute Condition Episode Payments would need to be defined for each subgroup, so that the physician and hospital wouldn't be penalized if they had a higher proportion of the higher-need patients nor would the payer pay an unnecessarily high amount if the providers had a lower proportion of high-need patients. For example, suppose that half of the patients had a lower-severity form of the condition where the procedure was used 50% of the time, and the other half had a higher-severity form of the condition where the procedure was used 90% of the time, but for each group of patients, the procedure was currently being used 10% more often than necessary. Then, as shown in Figure A-7, a two-tier Acute Condition Episode Payment could be defined, with a payment of \$4,200 for the patients with the lower-severity form of the condition and a payment of \$7,000 for the patients with the higher-severity form of the condition. If the physicians can reduce the unnecessary procedures for either or both groups of patients, then the payer will save money and the operating margins for both the physicians and the hospital will improve.

The "Risk" of Condition-Based Payment vs. Fee for Service

In any given year, the number of patients with the condition who are appropriate for the procedure will vary due to random and unmeasurable factors. Under the current fee-for-service system, the revenue for the physicians and the hospital will increase or decrease in direct proportion to the number of procedures that are performed. Under an Acute Condition Episode Payment, the revenues will be more stable, and the margins for the physicians and hospitals will actually vary less than they would under fee-for-service payment.

For example, under fee-for-service payment, if the proportion of patients needing the procedure increased or decreased by 10%, the physician's revenue would increase or decrease by \$12,600 (an 8% change). Under an Acute Condition Episode Payment, the physician would experience no change in revenue if more or fewer procedures were performed on the same total number of patients, so the physician practice would have a more predictable stream of revenue under an Acute Condition Episode Payment than under fee-for-service. The physician would receive more revenue if she treated more patients, but not if a different mix of treatments was provided to the same number of patients. (If the payment were acuity-adjusted, as illustrated in Figure A-7, then the physician would receive more revenue if she had a higher-acuity group of patients, but not because a different mix of services was delivered to patients with similar acuity.)

FIGURE A-7

HIGHER-NEED PATIENTS	CURRENT – FFS			CONDITION-BASED PAYMENT			% Change
	\$ Per Service	Patients	Total \$	\$ Per Patient	Patients	Total \$	
Physician Services							
Evaluations	\$100	150	\$15,000		150		
Procedures	\$600	135	\$81,000		122		
Subtotal			\$96,000		150	\$102,758	+7%
Medications	\$600	15	\$9,000		28	\$17,100	+90%
Hospital Services							
Fixed Costs (50%)	\$3,500		\$472,500			\$472,500	0%
Variable Costs (45%)	\$3,150	210	\$425,250			\$382,725	-10%
Margin (5%)	\$350		\$47,250			\$46,668	+3%
Subtotal	\$7,000	135	\$945,000		122	\$903,893	-4.4%
Total Revenue/Payment	\$7,000	150	\$1,050,000	\$6,825	150	\$1,023,750	-2.5%

LOWER-NEED PATIENTS	CURRENT – FFS			CONDITION-BASED PAYMENT			% Change
	\$ Per Service	Patients	Total \$	\$ Per Patient	Patients	Total \$	
Physician Services							
Evaluations	\$100	150	\$30,000		150		
Procedures	\$600	75	\$45,000		67		
Subtotal			\$60,000		150	\$62,588	+4%
Medications	\$600	75	\$45,000		83	\$49,500	+10%
Hospital Services							
Fixed Costs (50%)	\$3,500		\$262,500			\$262,500	0%
Variable Costs (45%)	\$3,150		\$236,250			\$212,625	-10%
Margin (5%)	\$350		\$26,250			\$27,038	+3%
Subtotal	\$7,000	75	\$525,000		67	\$502,163	-4.4%
Total Revenue/Payment	\$4,200	150	\$630,000	\$4,095	150	\$614,250	-2.5%

As for the hospital, under fee-for-service payment, if the number of patients receiving the procedure changed by 10%, the hospital's margins would vary by \$80,000 – a 110% change. Under the Acute Condition Episode Payment, the change in the hospital's margins would be much lower – a change of \$53,550 – but more importantly, the hospital's margins would improve if it did fewer procedures, whereas today, the only way for the hospital to improve its margins is to do more procedures, which increases overall healthcare spending.

From the payer's perspective, the spending per patient is constant regardless of the actual treatment the patient receives. Consequently, if it is appropriately structured, an Acute Condition Episode payment has less "risk" than fee for service payment for physicians, hospitals, and payers.

Comparison of Acute Condition Episode Payment to “Shared Savings”

Instead of an Acute Condition Episode Payment, assume that the physician and hospital in the preceding example entered into a shared savings arrangement with the payer. Under the shared savings arrangement, the payer will give 50% of the savings achieved in the first year to the physician and hospital during the second year.

Figure A-8 shows what would happen in the first two years of the program. In Year 1, the physician reduces the number of procedures performed by 10%. The physician and hospital both lose revenue (since they are still operating under fee-for-service payment, similar to Figure A-2), and the health plan saves \$147,000. In Year 2, the health plan keeps 50% of the savings from Year 1 and gives the other 50% (\$73,500) to the physician and hospital. The physician and hospital would have to decide how to allocate the payment between them; assume that the physician receives \$12,600, which would bring the physician’s total revenues in Year 2 back to where they were in Year 1. The \$60,900 that’s left would not be enough to make up for what the hospital had lost in its contribution margin. The hospital would no longer be losing money on the procedures, but it would not be making as much, and that would still have a negative impact on its finances.

More importantly, while the shared savings payment in Year 2 makes up some of the loss that the physician and hospital experience in Year 2, it doesn’t come close to also covering the loss that was experienced in Year 1. In fact, even after another year of shared savings payments in Year 3 of the contract, the physician still has 3% less cumulative revenue than she would have had if she had continued to perform the same number of procedures, and the hospital’s cumulative contribution margin is 55% lower than it would have been with no change in procedures.

FIGURE A-8

	YEAR 0 FFS			YEAR 1 FFS		Chg from Year 0	YEAR 2 FFS		Chg From Year 0
	\$ Per Service	Patients	Total \$	Patients	Total \$		Patients	Total \$	
Physician Services									
Evaluations	\$100	300	\$30,000	300	\$30,000		300	\$30,000	
Procedures	\$600	210	\$126,000	189	\$113,400		189	\$113,400	
Shared Savings								\$12,600	
Subtotal			\$156,000		\$143,400	-8%		\$156,000	0%
Medications	\$600	90	\$54,000	111	\$66,600	+23%	111	\$66,600	+23%
Hospital Services									
Fixed Cost	\$3,500		\$735,000		\$735,000			\$735,000	0%
Var. Cost	\$3,150		\$661,500		\$595,350			\$595,350	
Margin	\$350		\$73,500		(\$7,350)	-110%		(\$7,350)	-110%
Shared Savings								\$60,900	
Subtotal	\$7,000		\$1,470,000		\$1,323,000			\$1,383,900	
Margin+SS			\$73,500		(\$7,350)	-110%		\$53,550	-27%
Total Payments		300	\$1,680,000	300	\$1,533,000	-9%	300	\$1,533,000	-9%
Savings From Year 0					\$147,000			\$147,000	
Shared Savings Pmt								(\$73,500)	
Net Payer Savings					\$147,000	9%		\$73,500	4.4%

B. Bundled Payment for Management of Chronic Condition

Assume that a primary care practice is trying to manage the care of 500 patients with a moderately severe chronic disease. The primary care physicians see the patients frequently – 4 times per year – but they do not have enough time during the visits to provide extensive education to the patients and the practice cannot afford to hire a nurse or other staff to provide additional education and proactive outreach to the patients. As a result, the patients do not manage their condition effectively and they do not reliably take their medication, and half of them experience an exacerbation during the year that is sufficiently severe to require hospitalization. The only involvement that specialists have with the patients is when they are hospitalized. After the patients are discharged from the hospital, the cycle begins again.

Figure B-1 shows what current spending might look like for these types of patients, assuming that:

- the PCP is paid \$100 for each office visit with the patient (round numbers are used for simplicity);
- the specialist is paid \$100 for four visits with each patient during their hospitalization;
- the hospital is paid \$10,000 for each admission

A total of \$2.8 million is being spent on care of the 500 patients during the year, or an average of \$5,600 per patient.

FIGURE B-1

	CURRENT – FFS		
	\$ Per Visit	Patients	Total \$
Physician Services			
PCP (4 visits/year/patient)	\$100	500	\$200,000
Specialist (4 visits/admit)	\$100	250	\$100,000
RN Care Manager			
Subtotal			\$300,000
Hospital Services	\$10,000	250	\$2,500,000
Total Revenue/Payment	\$5,600	500	\$2,800,000

The PCP and the specialists could provide better care for the patients if they were not restricted to being paid only for office visits, if they could work together to jointly manage the patient's care, and if they had the ability to hire a nurse or other staff who could provide education and self-management support for the patient. This might be accomplished by paying the PCP and specialist on per patient basis for each of the patients, rather than paying them on a per-visit basis, and also providing them with enough money to hire a nurse care manager.

Figure B-2 gives an example in which the PCP is paid \$600 per patient per year, the specialist is paid \$300 per patient per year (for each of the patients who have the chronic condition, not just those who are hospitalized), and the physicians jointly receive \$80,000 to hire the nurse. This would be a 50% increase in payments to each of the physicians, and a total increase of 77% in spending on care by the physicians and nurse over what is being spent today, but if the team of physicians and nurse could reduce the preventable hospital admissions by one-third, the savings would more than pay for the increased spending on primary care and chronic disease management.

FIGURE B-2

	CURRENT – FFS			MODIFIED FFS			% Change
	\$ Per Visit	Patients	Total \$	\$ Per Patient	Patients	Total \$	
Physician Services							
PCP	\$100	500	\$200,000	\$600	500	\$300,000	+50%
Specialist	\$100	250	\$100,000	\$300	500	\$150,000	+50%
RN Care Manager						\$80,000	
Subtotal			\$300,000		500	\$530,000	+77%
Hospital Services	\$10,000	250	\$2,500,000	\$10,000	165	\$1,650,000	-34%
Total Revenue/Payment		500	\$2,800,000		500	\$2,716,000	-22%

Reducing admissions for these patients by 34% would reduce the hospital's revenues for these patients by the same amount. If one assumes that 60% of the hospital's current revenues are used to cover fixed costs that won't change in the short run with fewer patients, Figure B-3 shows that the improved chronic disease management would create a nearly half-million dollar loss for the hospital.

FIGURE B-3

	CURRENT – FFS			MODIFIED FFS			% Change
	\$ Per Visit	Patients	Total \$	\$ Per Patient	Patients	Total \$	
Physician Services							
PCP (4 visits/year/pt)	\$100	500	\$200,000	\$600	500	\$300,000	+50%
Specialist (4 visits/yr/pt)	\$100	250	\$100,000	\$300	500	\$150,000	+50%
RN Care Manager						\$80,000	
Subtotal			\$300,000		500	\$530,000	+77%
Hospital Services							
Fixed Costs (60%)	\$6,000		\$1,500,000			\$1,500,000	0%
Variable Costs (37%)	\$3,700		\$925,000			\$610,500	-34%
Margin (3%)	\$300		\$75,000			(\$460,500)	-714%
Subtotal	\$10,000	250	\$2,500,000	\$10,000	165	\$1,650,000	-34%
Total Revenue/Payment		500	\$2,800,000		500	\$2,716,000	-3%

A win-win-win solution can be developed, however, by using a Bundled Payment for Management of Chronic Conditions to pay both the physicians and the hospital. A 34% reduction in admissions would cause the hospital's variable costs to decrease by \$314,500, which is more than the \$230,000 increase in payments to the physicians, meaning that total spending could be reduced by \$84,500 (3%), without harming the hospital's margin. Figure B-4 shows that if the physicians and hospital agreed to take a Bundled Payment for Management of Chronic Condition in the amount of \$5,432 per patient – 3% less than the average of \$5,600 per patient the payer is spending now – they would have sufficient resources to provide improved ambulatory care to the patients and preserve the hospital's operating margin, while still reducing spending for the health plan by 3%. In contrast, under a "shared savings" payment model, there would be no upfront money to hire the nurse care manager or to pay the physicians more flexibly, and a 50% shared savings payment would not be adequate to cover both the hospital's costs (since 60% of the hospital's costs are fixed) and increase payments to the physicians.

FIGURE B-4

	CURRENT – FFS			CONDITION-BASED PAYMENT			% Change
	\$ Per Visit	Patients	Total \$	\$ Per Patient	Patients	Total \$	
Physician Services							
PCP (4 visits/year/pt)	\$100	500	\$200,000			\$300,000	+50%
Specialist (4 visits/yr/pt)	\$100	250	\$100,000			\$150,000	+50%
RN Care Manager						\$80,000	
Subtotal			\$300,000		500	\$530,000	+77%
Hospital Services							
Fixed Costs (60%)	\$6,000		\$1,500,000			\$1,500,000	0%
Variable Costs (37%)	\$3,700		\$925,000			\$610,500	-34%
Margin (3%)	\$300		\$75,000			\$75,500	+1%
Subtotal	\$10,000	250	\$2,500,000			\$2,186,000	-13%
Total Revenue/Payment	\$5,600	500	\$2,800,000	\$5,432	500	\$2,716,000	-3%

If the physicians failed to reduce hospital admissions by the goal of 34%, the hospital costs would be higher than projected, but the "risk" associated with this is not the \$10,000 payment the hospital currently receives per admission. The physician and hospital would only be at risk for the smaller marginal (variable) cost of an additional admission.

ENDNOTES

1. Mendelson A, Kondo K, Damberg C, et al. "The Effects of Pay-for-Performance Programs on Health, Health Care Use, and Processes of Care – A Systematic Review." *Annals of Internal Medicine* 166(5):341-353 (March 2017)
2. Miller H. *Implementing Alternative Payment Models in MACRA*. Center for Healthcare Quality and Payment Reform (January 2016). Available at: <http://www.chqpr.org/downloads/ImplementingAPMsUnderMACRA.pdf>
3. *Medicare Shared Savings Program Accountable Care Organizations Performance Year 1 Results, Medicare Shared Savings Program Accountable Care Organizations Performance Year 2014 Results, and Medicare Shared Savings Program Accountable Care Organizations Performance Year 2015 Results*, available at <https://data.cms.gov/browse?category=Special+Programs%2FInitiatives+-+Medicare+Shared+Savings+Program+%28MSSP%29>
4. Kwan LY, Stratton K, Steinwachs DM. *Accounting for Social Risk Factors in Medicare Payment*. The National Academies Press (2017).
Ryan, AM. "Will Value-Based Purchasing Increase Disparities in Care?" *New England Journal of Medicine* 369(26):2472-2474
5. Casalino LP, et al. "U.S. Physician Practices Spend More Than \$15.4 Billion Annually to Report Quality Measures," *Health Affairs* 35(3): 401-406 (2016).
6. Friedberg MW, et al. *Factors Affecting Physician Professional Satisfaction and Their Implications for Patient Care, Health Systems, and Health Policy*. RAND Corporation (2013).
7. Friedberg MW, et al. *Effects of Health Care Payment Models on Physician Practice in the United States*. RAND Corporation (2015).
8. Although the term "fee-for-service" was traditionally used to describe the way physicians are paid, it is also commonly used today to describe any payment system in which one healthcare provider receives a predefined amount (the "fee") for delivering a service (or a package of services) to a patient. For example, under Medicare, physicians are paid a pre-defined amount if they deliver a specific service described by a CPT® or HCPCS code that is covered by Medicare, hospitals are paid a pre-defined amount for an entire hospital stay, and home health agencies are paid a pre-defined amount for 60 days of home health care. In each case, one provider (the physician, the hospital, or the home health agency) receives a fee for a specific service or a group of closely-related services (a procedure, care during a hospital stay, or 60 days of home care) that one provider delivers to a single patient.
9. Miller HD. "From Volume to Value: Better Ways to Pay for Health Care." *Health Affairs* 28(5):1418-28 (2009).
10. Although there are other problems with current fee-for-service payment systems, these problems are not *inherent* to a fee-for-service system. For example, lack of price transparency about individual services (i.e., the inability to find out the actual amounts that providers are paid by health plans to deliver services) and price discrimination (i.e., the fact that different patients and payers pay different amounts for the same service from the same provider) are common problems with the way fee-for-service payment has been implemented by most private health plans, but these problems do not exist in the fee-for-service payment system used by Medicare.
11. For simplicity, the term "provider" will be used in this report to refer to any individual or organization that delivers healthcare services to individual patients and is paid for at least some of those services. This includes hospitals, physicians, nurse practitioners, physician assistants, physical therapists, skilled nursing facilities, home health agencies, etc.
12. Hart CWL. "The Power of Unconditional Service Guarantees." *Harvard Business Review* July-August 1988, pp 54-62;
Kandampully J, Butler L. "Service Guarantees: A Strategic Mechanism to Minimise Customers' Perceived Risk in Service Organizations." *Managing Service Quality* 11 (2):112-120 (2001);
Fruchter GE, Gerstner E. "Selling With 'Satisfaction Guaranteed.'" *Journal of Service Research* 1(4): 313-323 (1999);
Lutz NA. "Warranties as Signals Under Consumer Moral Hazard," *RAND Journal of Economics* 20(2): 239-255 (1989).
13. Baker LC, Bundorf MK, and Kessler DP. "Vertical Integration: Hospital Ownership of Physician Practices is Associated With Higher Prices and Spending." *Health Affairs* 33 (5):756-63 (2014).
14. To the extent that value-based payment models encourage or accelerate consolidation of provider organizations, then it could be argued that a fee-for-service payment systems helps keep prices lower.
15. It is not inconsistent to say that it is more expensive to deliver an *individual service* in a high quality way and to say that it will cost less to deliver *care* in a higher-quality way. A higher-quality service generally produces savings because it avoids the need for extra or repeat services, not because the service itself costs less. The problem with the fee-for-service payment system is that payers pay the same amount for a service even if higher payment would enable the payer to avoid paying for other additional services that would save more than the increased payment for the basic service. In other sectors of the economy, people are willing to pay more to purchase a product that carries a warranty because they will achieve savings by not paying for as many repairs.
16. The oncology practice's costs of administering chemotherapy are not completely variable. For example, the practice needs to have a pharmacy to store and mix drugs regardless of how many drugs it administers.

17. All else being equal, a provider that delivers only necessary procedures will have a higher-than-average cost per procedure than a provider that delivers unnecessary procedures because the provider's fixed costs must be recovered from a smaller number of procedures. If the payment amount is based on the average cost of *all* providers, including those that deliver unnecessary procedures, then the payment amount will be lower than the average cost of a provider that only delivers appropriate procedures.
18. In a "prior authorization" program, a health plan requires a physician to obtain approval from the health plan before a service is delivered or ordered, otherwise the health plan will not pay for the service.
19. The reason that delivering more services can be more expensive for payers than allowing a provider to charge more for its services is because multiple providers are often involved in the delivery of a service. For example, a surgeon may be paid \$1,000 for performing a surgery, but the hospital where the surgery is performed may be paid \$10,000 for its services. Paying the surgeon 10% more would only increase the payer's total spending on surgeries by 1% (a \$100 increase in the \$11,000 combined payments to the surgeon and hospital), but if the surgeon does 10% more surgeries, spending would increase by 10%.
20. See, for example, O'Connor AM, Llewellyn-Thomas HA, Barry Flood A. "Modifying Unwarranted Variations in Health Care: Shared Decision Making Using Patient Decision Aids." *Health Affairs* 63(1) (2004).
21. The ability of the provider to know what they will be paid by a private health plan does not necessarily mean that patients will know what the provider is paid. The inability of patients to find out the amounts a private insurance plan pays to individual providers for individual services (often referred to as "lack of transparency") is due to confidentiality restrictions in the contracts between providers and those private insurance plans, it is not due to any inherent feature of fee-for-service payment. In the Medicare fee-for-service system, anyone can easily determine what each provider will be paid for each individual service because the payment rates are established by regulation and made publicly available.
22. In many cases, pay-for-performance systems do not change the amounts paid for individual services, but merely provide a lump-sum bonus to the provider or withhold a portion of the practice's revenue and then pay that if the provider's performance qualifies. Although there may be no difference in the amounts by which the provider's revenues change, the two methods create somewhat different incentives. These differences will not be examined in detail in this report because they do not affect the key conclusions drawn about the pay-for-performance approach.
23. For example, in the Medicare Merit-Based Incentive Payment (MIPS) program, the fees that a physician is paid in the current year are based on quality measures calculated for patients who received care two years in the past.
24. Because most P4P systems make adjustments to payments or award bonuses and penalties a year or more after the care has been delivered, patients pay the same amount of cost-sharing for the services they receive even if a provider is later penalized because those services failed to meet standards for quality care.
25. For example, data published by the National Committee on Quality Assurance (NCQA) indicates that in 2015, among individuals insured by commercial PPO insurance plans, only 69.6% of women aged 50-74 were screened for breast cancer in the previous two years, only 57.1% of adults 50-75 years of age had been screened for colorectal cancer, only 53.4% of adults 18-85 years of age with hypertension had their blood pressure adequately controlled, and only 46.6% of adults with diabetes had their blood sugar under control. Available at: <http://www.ncqa.org/report-cards/health-plans/state-of-health-care-quality/2016-table-of-contents>
26. For example, in the Medicare Merit-Based Incentive Payment System (MIPS), fee-for-service payments for physicians will increase or decrease by up to 4% in 2019, and the maximum adjustment will be increased over time until it reaches 9% in 2026. In the Medicare Readmission Program, hospital payments can be reduced by up to 3%.
27. Casalino LP, et al. "U.S. Physician Practices Spend More Than \$15.4 Billion Annually to Report Quality Measures," *Health Affairs* 35, no.3 (2016): 401-406.
28. This same problem can occur when quality measures are merely publicly reported, even if there is no explicit financial bonus or penalty attached to the measures. The surgeon who operates on the higher-risk patients will have a higher mortality rate, which could encourage low-risk patients to select surgeons who do not operate on high-risk patients, and discourage surgeons from operating on the higher-risk patients. Koka A. "The Cost of Public Reporting." *The Health Care Blog* (September 18, 2017) <http://thehealthcareblog.com/blog/2017/09/18/the-cost-of-public-reporting/>
29. In 2017, hospitals were only evaluated based on their readmission rates for patients admitted for a heart attack, heart failure, pneumonia, COPD, hip/knee replacement, or coronary artery bypass graft surgery (CABG). <https://www.cms.gov/medicare/medicare-fee-for-service-payment/acuteinpatientpps/readmissions-reduction-program.html>
30. For example, CMS has been using measures of total spending and "episode" spending in both its P4P program for hospitals (the Value-Based Purchasing Program) and its P4P program for physicians (the Value Modifier). Congress required that the new Merit-Based Incentive Payment System (MIPS) for physicians include measures of resource use, but CMS has delayed implementation of resource use measures in MIPS until 2018 and has proposed delaying them again until 2019.
31. Shared savings models are often referred to as "one-sided risk" or "upside-only risk" programs, even though most people do not think of the potential to gain a bonus as "risk."
32. In Track 1 of the Oncology Care Model, Medicare keeps 100% of the first 4% of savings, the oncology practice receives 100% of any additional savings up to 20% of expected spending, and then Medicare keeps any additional savings. In Track 2, Medicare keeps 100% of the first 2.75% of savings, and the oncology practice receives 100% of additional savings up to 20%, but the oncology practice is also responsible for repaying increases in spending beyond 2.75% and up to 20%. <https://innovation.cms.gov/initiatives/Oncology-Care/>
33. Providers could also receive a bonus for stinting on care in a P4P system that uses spending measures; however, the magnitude of the bonus in a P4P system would be limited to a small percentage of the provider's payments, whereas

in a shared savings model, the bonus could potentially represent a large increase in the provider's payment.

34. If one of the side effects of the lower-cost treatment was that the patient experienced severe pain, the patient might need additional pain medications, and that would increase spending. However, depending on the relative costs of the drugs, even if there is higher spending on medications to treat the patient's pain, that might still be less than the savings from using the lower-cost drug to treat the patient's underlying health problem.
35. If the hospital had \$6,000,000 in fixed costs and it incurred an additional \$4,000 in costs each time it treated a patient, then spending \$100 more per patient to eliminate the readmissions would have reduced the hospital's costs to \$9,690,000 ($\$4,100 \times 900$ patients = \$3,690,000 variable cost + 6,000,000 fixed cost). The 50% shared savings payment of \$500,000 would have resulted in total revenues of \$9,500,000, but that would be \$190,000 less than the hospital's costs.
36. One study found that nearly half of the physicians in ACOs did not know whether they were eligible to receive shared savings or whether they were at risk for financial losses. Schur CL, Sutton JP. "Physicians in Medicare ACOs Offer Mixed Views of Model for Health Care Cost and Quality." *Health Affairs* 36(4): 649-654 (2017).
37. For example, if the cardiologists in a health system implemented a new service for patients with heart failure that reduced the rate at which the patients were hospitalized, but the orthopedic surgeons in the same system performed more hip and knee surgeries on other patients than they had in the past, total spending might increase despite the reduction in hospitalizations for heart failure patients.
38. The \$120,000 in payments to the surgeon does not all represent the surgeon's personal income. A physician practice can only bill for things the physician does, so the revenue generated by the physician must be used to support the staff, rent, etc. needed to operate the practice.
39. Moreover, since shared savings payment models rely on comparisons to providers who are not in the model, it is not clear how the shared savings calculations would be made if all providers were participating in the model, since there would no longer be a comparison group.
40. A simulation of the CMS Oncology Care Model conducted by the RAND Corporation estimated that Medicare spending would decline by more than the 4% savings target in one out of every nine oncology practices due solely to random variation. This also implies that an equivalent proportion of practices that actually reduced spending by more than 4% would not get credit for doing so and could be terminated from the program through no fault of their own. White C et al. *Oncology Simulation Report*. RAND Corporation (2014). Available at: http://www2.mitre.org/public/payment_models/Oncology_Simulation_Report_14-3380.pdf.
41. Technically, a "risk" adjustment system is intended to predict whether a patient will have needs or problems in the future. Since the situation described in the text requires an assessment of differences in current needs, it would be more accurate to describe this as a need-adjustment system.
42. In the Medicare Shared Savings Program, the adjustments for differences in patient needs are made to the provider's actual spending rather than the expected spending amount. This enables one expected spending amount to be used for all providers. Although the effect on the calculation of Shared Savings/Shared Risk payments is the same, it can be more difficult to understand the meaning of the spending measures.
43. Miller HD. *Measuring and Assigning Accountability for Healthcare Spending*. Center for Healthcare Quality and Payment Reform (August 2014). Available at: <http://www.chqpr.org/downloads/AccountabilityforHealthcareSpending.pdf>
44. Miller HD. *Improving Resource Use Measurement Under MACRA*. Center for Healthcare Quality and Payment Reform (February 2016). Available at: <http://www.chqpr.org/downloads/ImprovingResourceUseMeasurementUnderMACRA.pdf>
45. For example, the Medicare Shared Savings Program uses a prospective version of the Hierarchical Condition Category (HCC) risk adjustment system, which means that new health problems that appear in the current year are ignored in determining expected spending levels in the current year. Moreover, although a decrease in the average risk score for the patients attributed to an Accountable Care Organization results in a proportional reduction in the expected spending level for the ACO, an increase in the average risk score does not result in a proportional increase in the expected spending level. This is done because of concerns that healthcare providers will "upcode" the healthcare problems of their patients in order to artificially inflate their risk scores, but it means that ACOs whose patients become sicker over time could be financially penalized for continuing to care for these patients. Centers for Medicare and Medicaid Services. *Medicare Shared Savings Program: Shared Savings and Losses and Assignment Methodology Specifications* (April 2017). Available at <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Downloads/Shared-Savings-Losses-Assignment-Spec-V5.pdf>
46. Miller HD. *Measuring and Assigning Accountability for Healthcare Spending*. Center for Healthcare Quality and Payment Reform (August 2014).
47. Letter to Seema Verma, Administrator of the Centers for Medicare and Medicaid Services, from Clif Gaus, President and CEO of the National Association of ACOs (March 27, 2017). Available at <https://www.naacos.com/assets/docs/pdf/lettertoadministratorvermawiththopthreeissues032717final.pdf>
48. In the May 9, 2016 edition of "CPC+ Frequently Asked Questions," CMS stated "We have seen in the Original CPC Model that shared savings ...has certain limitations in motivating practices to control total cost of care. For example...total cost of care may be challenging for small primary care practices to control and there are no independent incentives for improved quality; andthe amount of any shared savings payments is unknown in advance and the complexity of the regionally aggregated formula and paucity of actionable cost data leaves practices doubtful of achieving any return. The incentive payment methodology in CPC+ will address some of these limitations. The incentive design is stronger because it can be more closely measured at the practice level, will incorporate measures that primary care practices can directly impact, and will be more easily understood by practice leaders."
49. Many of the "services" paid for under traditional fee-for-service are actually bundles of services. For example,

- although Evaluation and Management (E/M) requires a face-to-face office visit, it also assumes that a certain amount of “pre-work” and “post-work” (such as a follow-up phone call to a patient) is covered by the same payment.
50. Cromwell J, Dayhoff DA, and Thoumanian AH. “Cost Savings and Physician Responses to Global Bundled Payments for Medicare Heart Bypass Surgery.” *Health Care Financing Review* 19(1):41-57 (Fall 1997); IMPAQ International. *Evaluation of the Medicare Acute Care Episode (ACE) Demonstration*. (May 31, 2013) Available at: <https://downloads.cms.gov/files/cmml/ACE-EvaluationReport-Final-5-2-14.pdf>.
 51. Although the term “population-based payment” has been used to describe a range of different payment models, for the purposes of this report, it will be treated as synonymous with “global capitation,” i.e., a per-person payment that is designed to cover all or most of the healthcare services needed by a group of patients.
 52. More information on the Bundled Payments for Care Improvement (BPCI) program is available at: <https://innovation.cms.gov/initiatives/Bundled-Payments/>
 53. More information on the Comprehensive Care for Joint Replacement (CJR) program is available at: <https://innovation.cms.gov/initiatives/cjr>
 54. More information on the Oncology Care Model (OCM) is available at: <https://innovation.cms.gov/initiatives/Oncology-Care/>
 55. Typical capitation contracts include a “Division of Financial Responsibility” that defines which services and costs the providers are responsible for paying for from the capitation payment and which the payer pays for separately.
 56. One of the optional payment methodologies in the CMS Next-Generation ACO alternative payment model is “All-Inclusive Population-Based Payments,” in which the providers who are part of the ACO receive a monthly payment for each assigned Medicare beneficiary and are no longer paid for individual services under standard fee-for-service payment systems. More information on the Next Generation ACO model is available at <https://innovation.cms.gov/initiatives/Next-Generation-ACO-Model/>
 57. Miller HD. *Measuring and Assigning Accountability for Healthcare Spending*. Center for Healthcare Quality and Payment Reform, August 2014.
 58. Bundling the readmission into an episode payment is different than penalizing the hospital for the readmission under a P4P system or placing the hospital at partial risk for the readmission under a shared savings or shared risk program, because the financial penalty under the bundled payment is equal to the full payment the hospital would have otherwise received for the readmission, rather than either a fixed P4P penalty or a portion of the payment for the readmission.
 59. In a retrospectively reconciled payment model, if the provider managing the bundled payment orders an unnecessary service but the service is delivered by a different provider, then the payment to the provider who delivered the service would be deducted from the bundled payment, leaving less for the ordering provider.
 60. The capitation systems used to pay many provider organizations are not true global capitation structures, but instead are “professional services capitation” that only hold the provider organization responsible for professional fees for services patients need, not for hospital charges. In these cases, the “warranty” is much weaker. In the example in the text, if a patient was hospitalized for sepsis, the capitated provider would only be responsible for physician fees associated with the hospitalization, not for the payment to the hospital.
 61. The Medicare Inpatient Prospective Payment System addresses this problem for hospital payment by specifically distinguishing “conditions present on admission” from conditions that developed during the patient’s hospital stay.
 62. This assumes that the provider receiving the Procedure-Based Episode Payment operates the imaging equipment, rather than paying a fee to an imaging center for each imaging study performed.
 63. A key issue is whether there are services that are *not* included in the Procedure-Based Episode Payment or Population-Based Payment that (a) could serve as substitutes for one or more of the services that *are* included in the bundle and (b) the provider could deliver or order and have paid for separately from the bundle. For example, Medicare has paid hospitals for inpatient admissions using a treatment-based bundled payment program for over 30 years (the Inpatient Prospective Payment System), but the payment bundle only includes services delivered during the hospital stay. The hospital is not paid more if the patient stays in the hospital an extra day before returning home, but if the hospital discharges the patient to a skilled nursing facility, Medicare will pay for extra days of care there.
 64. Ridgely MS, de Vries D, Bozic KJ, and Hussey PS. “Bundled Payment Fails to Gain a Foothold in California: The Experience of the IHA Bundled Payment Demonstration.” *Health Affairs* 33(8):1345-1352 (2014).
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 66. Miller HD. *Bundling Badly: The Problems With Medicare’s Proposal for Comprehensive Care for Joint Replacement*. Center for Healthcare Quality and Payment Reform (July 2015).
 67. Garmon C and Chartock B. “One in Five Inpatient Emergency Department Cases May Lead to Surprise Bills.” *Health Affairs* 36(1): 177-181 (2017)
 68. This is somewhat similar to what is done in the Medicare Inpatient Prospective Payment System (IPPS), where higher payment amounts are paid for the same procedure if the patients have specific comorbidities that qualify for a different DRG. However, in the IPPS system, the higher payments are based on how much more hospitals spend on average for patients with comorbidities, not on how difficult it is to achieve the desired outcomes for them.
 69. The term “purchaser” will be used to describe the individual or organization that is ultimately responsible for the payment to a healthcare provider team, rather than an intermediary organization that performs administrative functions associated with the payment. For example, the majority of employer-sponsored health insurance plans are “self-funded” plans, meaning that the employer has full responsibility for providing the funds for each claim that is paid; the health insurance company that pays the provider is merely serving as an intermediary and is not

- responsible for having sufficient funds to cover claims expenses that are higher than expected. The purchaser (the employer) is “at risk” for payment, not the health plan, so it is the purchaser that will benefit from use of Patient-Centered Payments, not the intermediary.
70. This assumes that the surgery team needs the same amount of revenue to cover its costs. If current payments are significantly higher or lower than costs, then the Patient-Centered Payment amount would need to reflect the actual costs of delivering services as well as the expected number of patients who would not achieve the desired outcome.
 71. Carlson JJ, et al. “Current Status and Trends in Performance-Based Risk-Sharing Arrangements Between Healthcare Payers and Medical Product Manufacturers.” *Applied Economics and Health Policy*. 12(3):231-238 (2014).
 72. “Medicare Program; Revisions to Payment Policies Under the Physician Fee Schedule and Other Revisions to Part B for CY 2018; Medicare Shared Savings Program Requirements; and Medicare Diabetes Prevention Program.” *Federal Register* Vol. 82, No. 139 Friday, July 21, 2017.
 73. If it were possible to systematically predict that one subset of obese patients had better outcomes than a different subset, then the payment amounts could be lower for the first set of patients and higher for the others.
 74. Kim S, Cohen MA, and Netessine S. “Performance Contracting in After-Sales Service Supply Chains.” *Management Science*. 53(12): 1843-1858 (December 2007).
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 75. *Accelerating the Implementation of Value-Based Care and Payment: Recommendations from the 2016 National Payment Reform Summit*. Network for Regional Healthcare Improvement (2016). Available at: http://www.nrhi.org/uploads/2016_nationalpaymentreformsummit.pdf.
 76. Although one could avoid the need for a reserve fund by setting the price sufficiently high to cover costs in the years in which the low-rate adverse events occur (e.g., 110% of costs in the example in the text), this would result in windfall profits for the provider during the years in which the low-rate events do not occur.
 77. There are some CPT codes that can be used to pay for extended office visits or longer-than-usual surgeries.
 78. If one patient has a longer visit and a higher cost is assigned to that visit, the costs assigned to all of the other visits will need to decrease, because the total cost of operating the Emergency Department does not change. If the payment for each visit is the same, it will appear that the hospital lost money on the longer visit, but its profit on all the other visits would increase proportionately.
 79. Miller HD. “From Volume to Value: Better Ways to Pay for Health Care.” *Health Affairs*. 2009 Sept-Oct; 28(5):1418-28.
 80. The uncertainty would only apply to health problems that did not result from delivery of other healthcare services, since the Patient-Centered Payments would bundle in the cost of treating preventable complications.
 81. A physician may delegate tasks to a nurse or medical assistant, and a hospital will delegate care tasks to nurses or other staff.
 82. As with other aspects of Patient-Centered Payments, market forces could be used to determine what costs providers can reasonably control and which ones they can't. Since patients and payers would favor provider Teams that include a higher proportion of total costs under the bundled price, provider Teams that fail to create a comprehensive Team or fail to find alternatives to monopoly-priced services would lose patients and lose contracts with payers. If other Teams were successful in addressing costs and quality in a more effective way, they could attract additional payments.
 83. Miller HD. *Making the Business Case for Payment and Delivery Reform*. Network for Regional Healthcare Improvement (2014). Available at: <http://www.chqpr.org/downloads/BusinessCaseforPaymentReform.pdf>.
 84. Miller HD. *The Building Blocks of Successful Payment Reform: Designing Payment Systems That Support Higher-Value Health Care*. Network for Regional Healthcare Improvement (2015). Available at <http://www.chqpr.org/downloads/BuildingBlocksofSuccessfulPaymentReform.pdf>.
 85. For example, if the spending for those without functional limitations was \$3,572 and the spending for those with limitations was \$7,143 (twice as much), and if 40% of the patients had functional limitations, the overall average spending would be \$5,000. The spending for those without functional limitations would be 29% lower than the \$5,000 overall average, and the spending for those with limitations would be 43% higher.
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 87. <http://www.nationalacademies.org/hmd/Reports/2011/The-Healthcare-Imperative-Lowering-Costs-and-Improving-Outcomes.aspx>.
 88. The Centers for Medicare and Medicaid Services (CMS) has administratively renamed the Merit-Based Incentive Program (which is the name created by Congress in statute) to the “Quality Payment Program.”
 89. Hoff T. “The Battle of the Bundle: Lessons from My Mother’s Partial Hip Replacement.” *Health Affairs* 36(8):1511-1514 (August 2017).
 90. *Network for Regional Healthcare Improvement*. Jewish Healthcare Foundation. June 2016. Available from: <http://www.jhf.org/admin/uploads/nrhi-roots-publication-june-2016.pdf>.
 91. Brill JV et al. A Bundled Payment Framework for Colonoscopy Performed for Colorectal Cancer Screening or Surveillance. *Gastroenterology* 2014; 146:849-853.



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