



**CREATING PAYMENT SYSTEMS TO
ACCELERATE VALUE-DRIVEN HEALTH CARE:
ISSUES AND OPTIONS FOR POLICY REFORM**

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ABSTRACT: This paper is designed to assist health care payers and policymakers to restructure payment systems in ways that will improve the quality of health care and reduce (or slow the growth in) the costs of health care. Drawing on the research and proposals of many researchers and practitioners, it attempts to: summarize the key concepts involved in any discussion of ways to restructure payment systems; catalog the quality and cost problems that current payment systems create; list the key concerns that have been raised about pay-for-performance systems in health care; propose 12 goals that revised payment systems should seek to achieve in order to effectively address the problems; define the specific issues that need to be resolved in order to achieve these goals; describe the primary options for addressing each of these issues; and suggest a general strategy for making progress on payment restructuring.

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EXECUTIVE SUMMARY

The Need for Improved Payment Systems

A growing number of health care professionals around the country are increasingly frustrated by health care payment systems that do not reward efforts to improve health care quality, and that often penalize them financially. There is fairly widespread agreement that one reason for high costs and quality gaps is that current health care payment systems impose significant financial penalties and offer disincentives to providers (hospitals, physicians, and others) who supply quality, efficient care (e.g., lower-cost services, higher-quality care, cognitive services, preventive care, etc.), while they offer significant incentives for providing expensive, inefficient care (e.g., invasive treatment, use of technology, etc.) irrespective of outcomes.

Current payment systems create penalties and disincentives across all elements of health care, including the prevention of illness, diagnosis, treatment of conditions, and the follow-up to care. For example:

- Current fee-for-service systems generally do not pay adequately (or at all) for many elements of preventive care. In addition, low payment levels are believed to discourage physicians from entering primary care, as opposed to specialty care.
- Payers often do not have an incentive to invest in preventive care, since the payoff in terms of better health and lower costs occurs in the (distant) future and may accrue to other payers.
- Fee-for-service systems may not pay adequately for the time needed by a provider to make an accurate diagnosis and to develop an appropriate care plan and discuss it with their patient, particularly in complex or unusual cases. At the same time, providers are not financially penalized for ordering more tests, regardless of whether the tests are necessary to make an accurate diagnosis/prognosis.
- Fee-for-service payment systems reward providers for supplying more services, even if the services are unnecessary or of low value. Moreover, payment systems generally pay for services regardless of whether all of the processes recommended in clinical practice guidelines are performed by the provider, and research has shown that large proportions of patients do not receive important elements of care.
- Under most payment systems, providers are paid more for patients experiencing adverse events, particularly serious adverse events resulting in multiple

complications, and the providers' "profits" on patients experiencing such events may actually be higher than on patients with no adverse events.

- Payment systems reinforce fragmentation of care by paying multiple providers for multiple services or tests for the same patient, regardless of whether the care is coordinated or duplicative.
- Current payment systems generally do not pay hospitals or physicians more to manage the needs of patients with complex conditions after discharge from the hospital or to work proactively to encourage and assist the patient in complying with post-discharge instructions in order to improve outcomes and prevent rehospitalization.
- Patients generally do not have a financial incentive to adhere to prevention and disease management recommendations that could improve outcomes and reduce health care costs. Copayments and deductibles may discourage or prevent individuals from obtaining desirable preventive care services.
- Many payers do not have mechanisms for encouraging or directing patients to providers who supply better value—i.e., care at lower cost for the same quality, or higher quality at the same cost.

The Weaknesses of Current Pay-for-Performance Systems

Although a wide range of pay-for-performance, or P4P, systems have been developed to try to counteract some of these kinds of problems, there is growing concern that these systems are inadequate and potentially counterproductive. For example:

- The amount of performance bonuses and penalties in most P4P systems is relatively small, reducing the likelihood that they will overcome the problems they are intended to address. In fact, the reductions in a provider's net revenues from implementing a quality improvement initiative may exceed the payment incentives provided through a P4P system for that initiative.
- Most P4P systems focus on rewarding processes, rather than outcomes, which may (a) reward providers with poorer outcomes, and (b) unintentionally deter innovation and experimentation with new processes that achieve better outcomes.
- Measures are only available for a subset of the processes that are important to good outcomes; P4P systems that reward a subset of processes may divert attention from other important processes.

- Providing incentives based on outcomes (or even some processes) can create incentives for providers to exclude or under-treat patients who are likely to have poor outcomes or to be non-compliant with treatment regimes, or to over-treat patients who are likely to have better outcomes or be more compliant.
- Because of the fragmentation of care, it is often difficult or impossible to clearly assign responsibility for performance or lack of performance to a particular provider.

Potential Goals for Effective Value-Based Health Care Payment Systems

In order to address the problems with current payment systems and avoid the concerns about existing pay-for-performance systems, the following are 12 potential goals that revised payment systems should seek to achieve:

1. Payment systems should enable and encourage providers to deliver accepted procedures of care to patients in a high-quality, efficient, and patient-centered manner.
2. Payment systems should support and encourage providers to invest, innovate, and take other actions that lead to improvements in efficiency, quality, and patient outcomes and/or reduced costs.
3. Payment systems should not encourage or reward over-treatment, use of unnecessarily expensive services, unnecessary hospitalization or rehospitalization, provision of services with poor patient outcomes, inefficient service delivery, or choices about preference-sensitive services that are not compatible with patient desires.
4. Payment systems should not reward providers for under-treatment of patients or for the exclusion of patients with serious conditions or multiple risk factors.
5. Payment systems should not reward provider errors or adverse events.
6. Payment systems should make providers responsible for quality and costs within their control, but not for quality or costs outside of their control.
7. Payment systems should support and encourage coordination of care among multiple providers, and should discourage providers from shifting costs to other providers without explicit agreements to do so.
8. Payment systems should encourage patient choices that improve adherence to recommended care processes, improve outcomes, and reduce the costs of care.
9. Payment systems should not reward short-term cost reductions at the expense of long-term cost reductions, and should not increase indirect costs in order to reduce direct costs.

10. Payment systems should not encourage providers to reduce costs for one payer by increasing costs for other payers, unless the changes bring payments more in line with costs for both payers.
11. Payment systems should minimize the administrative costs for providers in complying with payment system requirements.
12. Different payers should align their standards and methods of payment in order to avoid unnecessary differences in incentives for providers.

Issues and Options for Improved Health Care Payment Systems

Five categories of issues need to be addressed in redesigning health care payment systems to meet these goals:

1. What basic method of payment should be used to compensate providers for care, i.e., fee-for-service, episode-of-care, capitation, or some other approach;
2. Whether payments for multiple providers should be “bundled” together;
3. How the actual level of payment should be determined;
4. What performance standards should be set and whether incentives for performance should be added to the basic payment method; and
5. Whether specific incentives should be provided to patients regarding choice of providers and participation in care.

There are multiple options available to address each of these issues, many of which are described in [Section VI](#) of the paper. In addition, different types of payment may be appropriate for different types of patients and conditions. Section VI provides examples of how the options can be combined into revised payment systems for several types of patients and conditions.

If incentives for performance are to be used, then nine additional issues should be addressed:

1. How should payments be changed based on provider compliance with non-mandatory processes?
2. How should payments be changed based on provider achievement of better patient outcomes?

3. How should payments be changed based on reduced utilization of services (or otherwise lower costs or slower growth in costs)?
4. How should payments be changed based on achievement of higher patient satisfaction levels?
5. Should payments be changed based on any other situations?
6. What threshold of performance should trigger payment changes?
7. How large should rewards or penalties be relative to base payment levels?
8. How should high-cost patients be protected against exclusion from care?
9. Should there be any adjustment in payment levels to reflect costs of information technology that providers need in order to comply with requirements for reporting on processes, outcomes, patient satisfaction, or reduced utilization/cost?

Again, there are multiple options available for addressing these issues, many of which are described in [Section VII](#) of the paper.

In addition, both basic payment systems and incentive systems presume the existence of:

- Categories of diagnosis and patient severity (with age and risk) for which payment levels can be consistently established;
- Guidelines for care (often called Clinical Practice Guidelines) for each category of diagnosis and patient severity;
- Estimates of the cost to providers of following guidelines for care in an efficient manner;
- Performance measures for each category of diagnosis and patient severity; and
- Methods of collecting and reporting on performance measures.

In many regions of the country, systems are in place for one or more of these activities, but in others, they are not. In addition, concerns have been raised about whether the processes that are in place at the national level are moving quickly enough. Options for addressing these issues are described in [Section VIII](#) of the paper.

Finally, several important issues need to be resolved in implementing a desired payment system, including:

- How should payment changes be phased in?
- Should payment changes be required to be “budget neutral?”
- How will the effects of payment changes be evaluated?
Some options for addressing these issues are described in [Section IX](#) of the paper.

Next Steps in Improving Payment Systems

Unfortunately, there are no easy answers regarding which options offer the best resolution for these many issues. Uncertainty exists due to the fact that there have been relatively few cases where significantly different payment systems have been attempted, and even fewer where thorough evaluations have been conducted. This leads to several conclusions about next steps:

- Payment demonstration projects must be developed, implemented, and evaluated in order to make progress on payment reform.
- A wide variety of payment demonstrations are needed. Just as experimentation and evaluation is a hallmark of evidence-based medicine, experimentation and evaluation will also likely be needed in order to develop the most effective cure for the ills of the payment system.
- The leadership for payment reform demonstrations should come from the regional level, rather than the national level. Health care is a fundamentally regional enterprise, since most providers and even most payers operate exclusively or primarily in metropolitan regions, states, or multi-state areas.
- While payment demonstrations can and should be pursued at the regional level, this does not mean that payment reform should be a parochial enterprise. Indeed, just as medicine itself advances the state of the art through local innovations that are supported, replicated, and evaluated nationally, so too can payment reform be more successful if there is national support for the development, evaluation, and replication of regional payment demonstrations.

CREATING PAYMENT SYSTEMS TO ACCELERATE VALUE-DRIVEN HEALTH CARE: ISSUES AND OPTIONS FOR POLICY REFORM

I. INTRODUCTION

A growing number of health care professionals around the country are increasingly frustrated by health care payment systems that do not reward efforts to improve health care quality, and that often financially penalize them. There is fairly widespread agreement that:

- Premise 1.1:** Health care systems are not providing the highest quality care possible for the money currently being spent.
- Premise 1.2:** The same or higher quality health care could be provided for less money than is being spent today.
- Premise 2:** One reason for high costs and quality gaps is that current health care payment systems attach significant financial penalties and offer disincentives to providers (hospitals, physicians, and others) who supply quality, efficient care (e.g., lower-cost services, higher-quality care, cognitive services, preventive care, etc.) and significant incentives for providing expensive, inefficient care (e.g., invasive treatment, use of technology, etc.) irrespective of outcomes.
- Premise 3:** Factors other than the financial penalties and disincentives in the payment system also cause increased costs and reduced quality of health care (e.g., lack of training for health care professionals in methods of identifying and reducing waste; and defensive medicine driven by liability concerns).
- Premise 4:** Changing the structure of payment systems appropriately has the potential to increase the quality and/or reduce (or at least control the growth in) the costs of health care.

In order to address the problems described in Premises 1.1, 1.2, and 2, and to realize the opportunity inherent in Premise 4, there are two basic paths which the health care industry could follow:

- Path #1:** Eliminate or modify the aspects of current health care payment systems that provide penalties or disincentives for lower-cost, higher-quality health care.

Path #2: Add new rewards or incentives to existing health care payment systems to encourage lower-cost, higher-quality health care.

Most current pay-for-performance (P4P) programs and demonstrations are following primarily Path #2, leaving the current payment system structure alone, and adding a new layer of rewards and incentives on top of it.

However, there appears to be a growing consensus among health care purchasers, plans, providers, researchers, and policy-makers that Path #2 alone is inadequate, and that:

Premise 5: In order to achieve the most efficient, effective, and sustainable improvements in quality and reductions (or slowing the growth) in costs, the penalties and disincentives in current health care payment systems need to be eliminated or modified (i.e., Path #1), in addition to adding rewards or incentives (Path #2).

Consistent with this premise, this paper attempts to outline information needed to address two key questions:

Question 1: What fundamental changes should be made in the structure of current health care payment systems in order to eliminate (or significantly reduce) the current penalties and disincentives for higher-quality, lower-cost health care?

Question 2: What incremental rewards or penalties, if any, should be added to restructured health care payment systems in order to encourage higher-quality, lower-cost health care and discourage lower-quality, higher-cost health care?

It is important to recognize the implications of Premise #4: Not all quality and cost problems are caused by payment systems, and not all quality and cost problems can be resolved by changes in payment systems—i.e., payment reform is not a panacea for the problems in health care. In designing and evaluating changes to payment systems, it will be important to clearly define what kinds of changes in quality and cost are expected to result and what is the logical connection between the payment system changes and the expected changes in quality and/or cost.

II. KEY CONCEPTS FOR RESTRUCTURING PAYMENT SYSTEMS

Discussions about payment systems in health care inherently encompass several key concepts: the different types of methods by which payment can be made to health care providers; the different types of patients and conditions for which payment is being made; the different types of costs involved; and the different types of performance that payment systems might be expected to encourage (or not discourage). In order to help organize discussions regarding ways to restructure payment systems, definitions and potential taxonomies for each of these concepts are offered below.

A. Definitions of Terms

For simplicity, the term “payer” is used throughout this paper to refer to organizations or individuals purchasing health care directly from health care providers, whether they be health insurance plans, self-insured organizations (directly or through third-party administrators), government agencies paying for health care (such as Medicare and state Medicaid agencies), or self-pay individuals. The cost or payment by the ultimate purchaser (e.g., an employer) may be very different from the cost or payment by a health plan that they use as the direct payer, but this is a function of the structure of the insurance contract between the purchaser and the payer, and will not be addressed in this paper. This paper will focus on payments made directly to providers for care of patients and on the costs incurred by patients and their employers for both the provision of health care and the results of health care (see [Section II-E](#)). However, it is important to note that the benefit and cost structure of health plans has a significant effect on both the payment structure for providers and the incentives for patients.

The term “provider” is used to refer to organizations and individuals providing health care to individuals, including hospitals, physicians, clinics, nursing homes, diagnostic labs, etc. This may include patients themselves, through self-care regimes.

The term “patient” is used to refer to individuals receiving health care services, including healthy individuals receiving preventive care.

The term “care” refers to services and processes designed to improve patients’ health or prevent it from worsening. This includes services provided by patients themselves, as well as by physicians, diagnostic services at laboratories, drugs and medical devices (whether self-administered or administered by health professionals), and non-physician services and facility-based care, such as hospitals, home health agencies, rehabilitation facilities, nursing homes, etc. (See [Section II-D](#).)

An “episode of care” involves a set of services whose beginning and end is defined by the beginning and end of the patient’s condition or course of treatment, rather than the beginning and end of a particular provider’s service or services. Theoretically, a full episode of care runs from the initial diagnosis of a condition to completion of all treatment of that condition. However, because some patients will never be “cured” of a condition, such as patients with a chronic disease, and because patients who do not have a preventable disease may take preventive steps for a long period of time, for practical purposes an episode of care for preventive health or chronic disease may be defined in a more time-limited fashion. Similarly, because of fragmented delivery structures, some episode-of-care payment systems focus on a portion of the complete episode of care that is delivered by a particular provider or group of providers (see Sections [II-B](#) and [II-D](#)).

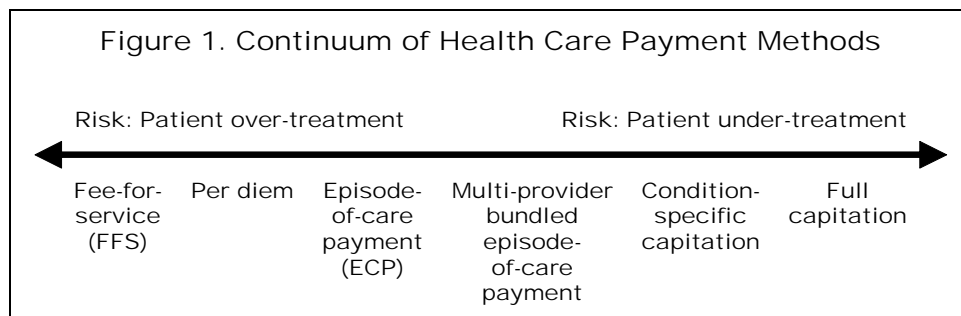
A “payment system” is the methodology that a payer uses to compensate one or more providers for the care provided to a patient. This includes definitions of what will be compensated and what will not be compensated, the general way that compensation will vary depending on characteristics of the patient or the care provided, which providers and/or costs will be covered under a single payment, etc.

The term “value” will be used to refer to the ratio of the quality of health care to the cost of care—i.e., more quality for the same cost is higher value, and the same quality for lower cost is also higher value.

The term “value-based payment system” means that in some fashion, payment is based on the value of care provided.

B. Types of Payment Methods

Although there are many different ways to pay for health care, one can define six different conceptual types of payment methods along a continuum (Figure 1).



1. **Fee-for-Service (FFS).** A provider is paid a fee for each specific service rendered.
2. **Per Diem.** A provider is paid a fee for each day of care, covering all services rendered during that day.
3. **Episode-of-Care Payment (ECP).** A provider is paid a fee for all services rendered during a single episode of care or portion of an episode of care. (For example, the DRG prospective payment system currently used for hospitals by Medicare and other payers is an episode of care system, although it only covers the portion of the full episode of care that occurs in the hospital. In addition, surgeons are typically paid a single amount for all services associated with a particular episode of care, rather than separate fees for surgery and follow-up care.)
4. **Multi-Provider Bundled Episode-of-Care Payment.** Two or more providers are jointly paid a fee for their combined services rendered during a single episode of care. (The beginning and/or end of the episode of care may also change when multiple providers are included; for example, an “episode-of-care” payment system for hospitals typically ends upon discharge from the hospital, and an “episode-of-care” payment system for home health services typically begins after hospital discharge, but a bundled hospital/home health episode-of-care payment would treat hospital discharge as merely a step in a single, longer episode of care.)
5. **Condition-Specific Capitation.** A fee is paid to cover all services rendered by all providers to deal with a particular condition, either on a one-time basis (for short-term conditions) or on a regular, periodic basis (for longer-term conditions, such as chronic diseases).
6. **Capitation.** A regular, periodic fee is paid to cover some or all services rendered by all providers for all conditions affecting a particular patient.

(This structure is adapted from various authors, particularly J. C. Robinson, “[Theory and Practice in the Design of Physician Incentives](#),” *Milbank Quarterly*, June 2001 79(2):149–77.)

Most current payment systems are on the left end of this continuum. Payment for hospitals through Medicare has been based on a form of single-provider Episode of Care payment (the prospective payment system (PPS) using DRGs) for over 20 years, but many private health plans still pay on a per diem or other basis that is closer to a fee-for-service system. Payment for physicians is still primarily based on fee-for-service. Capitation plans were used heavily in the 1990s under managed care but are being used less now, although this varies from state to state and from payer to payer.

The Incentives Associated with Different Payment Methods

There is no perfect model, because each system inherently creates incentives and disincentives for the provider, which in turn create risks for the payer and the patient. Payment systems on the left-hand side of the continuum have risks of higher costs to payers and over-treatment of patients, while payment systems on the right-hand side of the continuum shift the risks of costs to providers, but thereby create risks of under-treatment of patients.

More precisely, payment systems are structured based on whether the payer or provider is at risk for specific variables affecting cost. In a simplified model of the cost to a payer for all of the care associated with a particular patient, the variables affecting cost can be defined as follows (Figure 2):

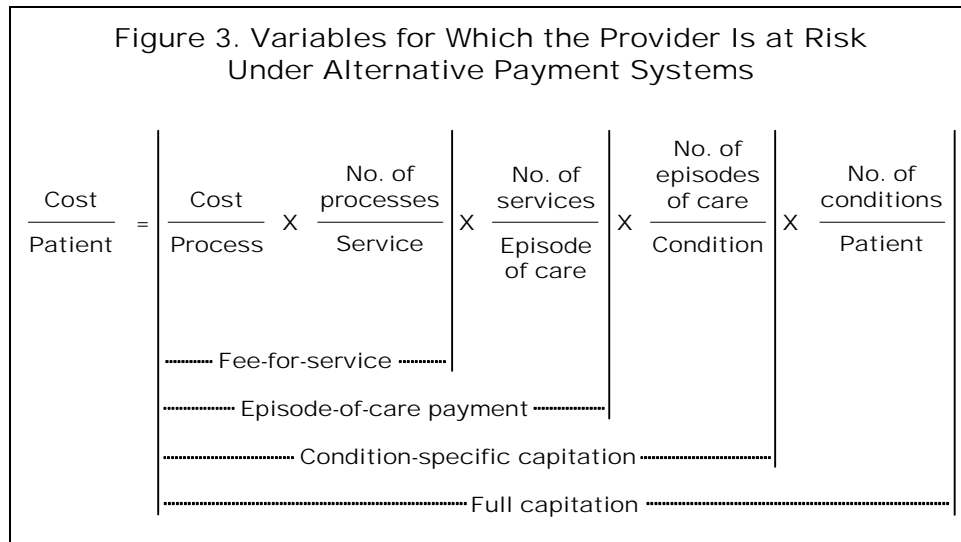
Figure 2. Variables Contributing to the Cost of Care										
$\frac{\text{Cost}}{\text{Patient}}$	=	$\frac{\text{Cost}}{\text{Process}}$	x	$\frac{\text{No. of processes}}{\text{Service}}$	x	$\frac{\text{No. of services}}{\text{Episode of care}}$	x	$\frac{\text{No. of episodes of care}}{\text{Condition}}$	x	$\frac{\text{No. of conditions}}{\text{Patient}}$

The patient has some conditions requiring care (including preventive care for conditions which have not yet been experienced). For each of those conditions, the patient may have one or more episodes of care (in the case of heart disease, for example, a patient may have multiple heart attacks or require readmission to the hospital for complications of an earlier episode of care). For each episode of care, there will likely be multiple services provided, often by different providers. Even within each service provided, there may be multiple steps or processes involved in providing that service. Each process/service has a cost associated with it.

The total costs of care for a patient will be higher if any one of these variables increases. Even if a provider performs a particular step in the process at lower cost, if more steps are completed for a particular service, and if more services are provided for a particular episode of care, etc., then the total cost of care for that patient will be higher.

The different methods of payment assign the risk for the different variables in this equation to either the payer or the provider (Figure 3). Shifting the risk to the provider

reduces the risk of over-treatment and higher costs. However, in the process, it creates a risk to the patient of under-treatment.



- For example, fee-for-service payment defines a specific amount for a particular service, regardless of how many or how few process steps a provider may be required to perform. It is generally agreed that the fee-for-service system creates significant incentives for over-treatment. However, within any given service, there is still the risk that the patient will not receive all of the processes of care necessary, which has led to recent pay-for-performance initiatives to encourage fee-for-service providers, such as physicians, to provide more of the desired processes of care.
- Episode-of-care payment shifts the risk of the number of services for any episode of care to the provider (or group of providers), but also thereby creates a risk that the patient will receive fewer services than appropriate.
- Condition-specific capitation creates an incentive for a provider to reduce the number of episodes of care.
- Full capitation creates an incentive for providers to prevent the occurrence of illnesses as well as to treat them more efficiently, but puts the providers at risk if they have patients who are sicker than average, and creates the risk that patients will be under-treated in ways that will affect costs in the long run (see [Section II-E](#)).

There is growing interest in payment methods in the middle of the continuum—staying away from full capitation systems (because of the significant risk they place on providers), but also moving away from fee-for-service systems (because of the significant

risk of high costs they place on payers) toward episode-of-care (ECP) systems; from single provider ECP systems to multi-provider ECP systems; and to broader definitions of the episode of care. The goal has been to create systems that avoid imposing insurance risk on providers (i.e., having providers absorb the differences in costs resulting from differences in the types of patients and their needs), but giving providers more responsibility for managing the full range of costs and outcomes of treatment for patients with similar needs.

Offsetting the Risks and Disadvantages of Alternative Methods

Each variable that is *included* within a single payment amount creates a risk that the provider receiving the payment will under-treat or exclude patients that have high values on that variable (e.g., patients who need an above-average number of services per episode of care) in order to reduce their costs in comparison to the payment. Each variable that is *excluded* from a single payment amount creates the risk of over-treatment—i.e., that providers will seek additional patients, episodes of care, etc., beyond what otherwise might be necessary, in order to increase the total amount of revenue they receive.

Therefore, within a particular payment structure, controls or incentives can be developed to counteract these risks. For example, in an episode-of-care payment system, one set of controls and incentives could be developed to insure that important care processes are not ignored as part of the episode of care, and another set of controls and incentives could be developed to discourage providers from providing episodes of care to patients who do not need them.

Conceptually, there are several different types of controls and incentives which can be developed:

1. **Mandates**, i.e., requiring that providers do certain things or prohibiting them from doing things in order to receive payment, while imposing mechanisms for reviewing the level of compliance with those requirements or prohibitions (e.g., audits to insure that required processes of care are actually delivered to a particular patient to insure under-treatment did not occur);
2. **Non-Financial Incentives**, i.e., publicly reporting on providers' performance (e.g., reporting on the frequency with which providers deliver desirable processes of care to patients); and
3. **Financial Incentives**, i.e., providing payment rewards or penalties to providers based on their performance (e.g., providing bonuses for greater compliance with specific processes of care or for better patient outcomes).

C. Types of Patients/Conditions

Different types of payment may be appropriate for different types of patients and conditions. Four broad categories of patients and conditions can be defined for considering alternative payment structures. (These categories are drawn from “Overview of a Reconfigured Health System,” by Harold S. Luft, presented to the Council on Health Care Economics and Policy at the Thirteenth Princeton Conference on Reinventing Health Care Delivery in the 21st Century, May 24–25, 2006):

1. **Care of Major Acute Episodes.** This includes conditions such as heart attack, stroke, premature delivery, newly diagnosed invasive cancer, or major trauma, and is characterized by the patient needing a complex mix of often expensive interventions within a relatively brief period of time.
2. **Care of Chronic Conditions.** This includes conditions such as diabetes, hypertension, heart failure, asthma, etc., but excludes the acute exacerbations of the condition that result in a major acute episode.
3. **Care of Minor Acute Episodes.** This includes minor wounds, normal childbirth, minor respiratory diseases, etc. Some conditions may be self-limiting or may not even require treatment, but some may be the early manifestation of something more serious or potentially more serious.
4. **Preventive Care.** This includes immunizations, screening tests, counseling, etc., designed to prevent chronic conditions and some acute episodes.

Each of these categories encompasses a very diverse range of conditions. For example, some have suggested that pregnancy and childbirth should be considered as a separate category, since in some cases it may be a “major acute episode” and in other cases it is more of a “minor acute episode,” and since many aspects of prenatal and postpartum maternal and infant care are preventive in nature. However, the issue for this paper is not whether these different conditions require different kinds of *care*, but whether the method of *payment* for care should be different.

The categories are also inherently overlapping. For example, a person with a chronic disease will not only need ongoing care for that chronic condition, but care of major acute episodes (whether related to the chronic condition or not), care of minor acute episodes (whether related to the chronic condition or not), and care to prevent other illnesses.

In the case of chronic conditions, some have suggested that a distinction should be made between people with chronic conditions that are “stable” or “routine,” and those

with chronic conditions that are “unstable,” “advanced,” or “complex,” or where the patient is sick enough that death within a year “would not be a surprise.” For example, Joanne Lynn and David Adamson have suggested that elderly people with chronic, progressive, and eventually fatal illness should be considered separately from individuals with chronic conditions whose diseases can be successfully managed indefinitely. They further identify three different trajectories among the elderly with chronic conditions:

- A short period of evident decline (typical of cancer);
- Long-term limitations with intermittent exacerbations and sudden dying (typical of organ system failure); and
- Prolonged dwindling (typical of dementia, disabling stroke, and frailty).

(This tripartite structure is from *Living Well at the End of Life: Adapting Health Care to Serious Chronic Illnesses in Old Age*, by Joanne Lynn and David M. Adamson, RAND Health, 2003.)

These categories likely require different types of services and incur different kinds of costs (see Sections [II-D](#) and [II-E](#)) than the other categories, particularly long-term care, hospice and palliative care, etc.

D. Types of Costs and “Bundling” of Payment

For purposes of payment, there are several major types of costs which contribute to the overall cost of care, but which are affected by different sets of forces. These types of costs are being paid for separately under most current payment systems, but they could also be “bundled” together. Six major types of costs include:

1. Primary Care Physician Services
2. Specialist Physician Services
3. Diagnostic Services (e.g., lab tests, radiology, etc.)
4. Drugs and Medical Devices
5. Short-Term Non-Physician Services and Facilities (e.g., hospitals, home health agencies, rehabilitation facilities, etc.)
6. Long-Term Non-Physician Services and Facilities (e.g., nursing homes, assisted living services, etc.)

These different types of costs can represent very different proportions of the total costs of care for different patients/conditions.

Payment systems can either pay for these costs separately, or pay for them in bundles. For example, currently, hospital DRG payments typically cover diagnostic services, drugs and medical devices, and hospital-based services (Types 3, 4, and 5 above), but not physician services. Capitation systems may “carve out” some of these costs and pay for them separately; for example, medical capitation is limited to costs of medical services, whereas long-term care capitation includes long-term care services as well. (See, for example, “Aligning Incentives in the Context of Biomedical Innovation,” by James C. Robinson, presentation at the National Pay for Performance Summit, February 16, 2007, for discussion of how device costs and physician costs can be either bundled into or carved out of alternative payment structures.)

E. Indirect and Long-Run Costs

Most discussions of health care costs focus on the short-term payments made to providers for health care services associated with a particular patient. However, there are really four major categories of costs that should be considered in examining the impacts of different methods of payment:

1. **Short-Run Direct Costs.** These include the spending by a health care provider for immediate services. For example, the payment made to a hospital to treat an individual’s pneumonia would be a short-run direct cost.
2. **Short-Run Indirect Costs.** These include the cost of lost time from work or other activities by an individual while receiving health care services. For example, the patient’s lost wages or lost productivity while in the hospital for treatment of pneumonia would be a short-run indirect cost. They may also be expanded to include the costs associated with time required from caregivers (e.g., if someone with a fragile, chronically ill parent needs to take time off from work or leave the workforce entirely in order to provide care).
3. **Long-Run Direct Costs.** These include expenditures by health care providers in the future that are caused or influenced in some fashion by the services (or lack of services) provided today (i.e., in the short run). For example, if the failure of an individual to receive pneumonia vaccine today results in that individual contracting pneumonia in the future, the treatment of that future pneumonia is a long-run direct cost of the lack of pneumonia immunization.
4. **Long-Run Indirect Costs.** These include the cost of lost time from work or other activities in the future resulting in some fashion from the services (or lack of services) provided during the short run.

Since a dollar in the future is worth less than a dollar in the present, one cannot directly compare the costs in categories 1 and 2 with the costs in categories 3 and 4 without computing the “present value” of the latter costs (which in turn requires an assumption about inflation and/or interest rates).

In order to properly compare the costs of one payment policy versus another, one should ideally estimate all four categories of costs (which requires converting indirect costs, such as time saved or lost, into dollars), compute the present value of the future costs, and add them together; i.e.,

$$\begin{aligned} \text{Total Cost} = & \text{Short-Run Direct Costs} + \\ & \text{Short-Run Indirect Costs} + \\ & \text{Present Value of Long-Run Direct Costs} + \\ & \text{Present Value of Long-Run Indirect Costs} \end{aligned}$$

For example, creation of an immunization program would increase short-run direct costs (and might even increase short-run indirect costs because of the time involved for people to get an immunization), but if it would prevent a communicable disease, it would reduce long-run direct and indirect costs. Whether total costs would be higher or lower would depend on whether the number of people immunized and the cost of immunization (the short-run costs) are higher or lower than the number of people who would otherwise become sick in the future and the cost of treating them (the long-run costs).

F. Number and Types of Payers and Providers

Multiplicity of Payers

In any given health care market, there are multiple payers, using both public sources of funds (Medicare and Medicaid), and private sources (private insurance plans, third-party administrators, and self-pay individuals). Each payer typically has different methods of paying providers. Any given provider may face significantly different incentives and disincentives for the care of patients with similar conditions depending on which payer is paying for a patient’s care.

In addition, the different categories of costs described in [Section II-E](#) above are generally not incurred by the same payer. For example, an investment in preventive care for a working-age adult made by an employer and its health plan may increase costs for that employer/health plan but reduce costs for Medicare (or another employer/health plan) in the future. If an insured individual travels a longer distance to use a provider that

charges less for care, the individual will incur the higher costs of travel while the cost of care to the individual's health plan declines.

Multiplicity of Providers

The number and types of providers vary significantly from region to region, which affects the range of choices available to payers and patients. Small, rural areas may have few physicians and a single hospital, whereas large, urban areas will have many physicians, multiple hospitals, and a range of alternative providers (clinics, urgent care centers, specialty hospitals, etc.).

Where multiple providers are available, individual patients often receive care services from multiple providers even within a single episode of care or short period of time. (For example, recently released research shows that among Medicare beneficiaries, the average patient saw two primary care physicians and five specialists, working in a median of four practices, over the course of a year. Patients with chronic conditions saw a larger number of physicians and physician practices. See "Care Patterns in Medicare and Their Implications for Pay for Performance," by Hoangmai H. Pham, Deborah Schrag, Ann S. O'Malley, Beny Wu, and Peter B. Bach, *New England Journal of Medicine*, 356:11, pp. 1130–39, 2007.)

G. Performance Categories for Health Care Systems

In its 2006 report, *Rewarding Provider Performance*, the Institute of Medicine's Committee on Redesigning Health Insurance Performance Measures, Payment, and Performance Improvement Programs defined three broad categories of performance that payment systems should seek to advance in health care systems:

1. **Clinical Quality**, which encompasses effectiveness, safety, timeliness, and equity;
2. **Patient-Centeredness**, an attribute of care that reflects the informed preferences of the patient and the patient's significant others, as well as timeliness and equity; and
3. **Efficiency**, defined as achieving the highest level of quality for a given level of resources.

Within the clinical quality category, there are two fundamentally different types of measures one can use to assess performance and potentially to modify payments to providers:

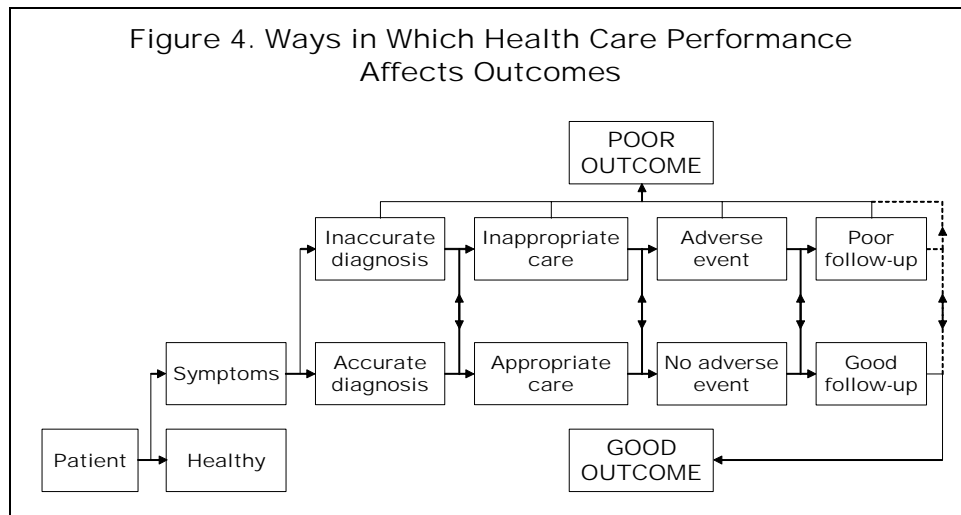
- 1a. **Process Measures**, i.e., measures of the specific procedures or tasks carried out by providers or patients, e.g., administration of drugs, examinations or testing for specific issues, etc.
- 1b. **Outcome Measures**, i.e., measures of the patient's health or quality of life, e.g., death, disability, etc.

Within the patient-centeredness category, there are some conditions where multiple care options exist that involve significant tradeoffs affecting the patient's quality and/or length of life. Decisions about this "preference-sensitive" care cannot be based on clinical guidelines alone, but need to reflect the patient's personal values and preferences (see "Preference-Sensitive Care," Dartmouth Atlas Project, 2007).

III. PROBLEMS WITH CURRENT HEALTH CARE PAYMENT SYSTEMS

At the risk of oversimplifying, one can define five major areas where the performance of health care systems can affect patient outcomes and/or health care costs (Figure 4):

1. Prevention of Illness and the Progression of Illness
2. Accuracy of Diagnosis/Prognosis
3. Appropriateness of Care
4. Avoidance of Adverse Events
5. Follow-Up to Care



In each of these areas, current payment systems create penalties and disincentives for improved outcomes and/or lower costs. In addition, payment systems can more generally discourage efficiencies in care or increase costs of care.

The following sections attempt to summarize the problems that exist in each area in order to provide a foundation for the sections that follow.

A. Prevention of Illness and the Progression of Illness

One of the purposes of the health care delivery system, particularly through primary care physicians, is to help prevent illnesses (or disease states) from occurring or worsening. In addition, depending on the illness, patient adherence and the physical environment (e.g., public health factors) can be significant factors in the success of prevention efforts.

- Problem 1.1:** Current fee-for-service systems generally do not pay adequately (or at all) for many elements of primary care and preventive care. In addition, low payment levels are believed to discourage physicians from entering primary care as opposed to specialty care.
- Problem 1.2:** Current fee-for-service systems generally do not pay adequately (or at all) for the more complex care issues associated with the elderly and other people with chronic conditions.
- Problem 1.3:** Patients generally do not have a financial incentive to adhere to prevention and disease management recommendations that could reduce health care costs.
- Problem 1.4:** Payers may not have an incentive to invest in preventive care if the payoff in terms of better health and lower costs occurs in the (distant) future and may accrue to other payers.

B. Accuracy of Diagnosis/Prognosis

Once an illness has occurred, prompt and accurate diagnosis (i.e., determining what condition[s] the patient has) and prognosis (i.e., projecting the likely course of the condition[s] with and without treatment) are essential to appropriate care. Inaccurate diagnoses and prognoses may result in (a) unnecessary or inappropriate care, with the associated expenses and risk of adverse effects, and/or (b) the failure to apply appropriate care in a timely fashion, potentially leading to poorer outcomes. This area appears to have been subject to the least research.

- Problem 2.1:** Fee-for-service systems may not pay adequately for the time needed by providers to make an accurate diagnosis/prognosis and to discuss it with patients, particularly in complex or unusual cases. Providers can have a financial incentive to order more diagnostic tests rather than spend more time with a patient to explore symptoms more carefully.
- Problem 2.2:** Under fee-for-service systems, providers are not compensated for investments in information systems that could assist in making an accurate diagnosis/prognosis.
- Problem 2.3:** Under fee-for-service systems, providers are not financially penalized for ordering more tests, regardless of whether the tests are necessary to make an accurate diagnosis/prognosis.

Malpractice concerns may encourage over-testing, but fee-for-service payment eliminates the financial penalty faced by the provider for doing so.

Problem 2.4: Under fee-for-service systems, providers are paid for conducting tests regardless of whether they are necessary to make an accurate diagnosis/prognosis.

Problem 2.5: Under fee-for-service systems, providers making diagnoses/prognoses are paid regardless of the accuracy of the diagnosis/prognosis.

Problem 2.6: Current payment systems can financially reward providers for making overly optimistic prognoses of the likelihood of survival or the benefits of treatment.

For example, overly optimistic prognoses can lead patients in the final stages of terminal illnesses to pursue expensive treatment rather than palliative care.

Problem 2.7: Under fee-for-service systems, providers that supply testing information used in making diagnoses/prognoses are paid regardless of the accuracy of their collection and interpretation of data.

For example, pathologists play a crucial role in determining whether a malignancy is present and in classifying the type and stage of a malignancy, which in turn is critical to determining whether and what type of treatment is appropriate. Pathologists are paid for analyzing tissue and serum samples even if the analysis or interpretation is found later to be inaccurate. There is some evidence of significant rates of errors in testing.

Problem 2.8: Patients (and/or families) may request or demand expensive tests that may not be appropriate but increase the cost of diagnosis/prognosis, without any financial penalty to the patient for doing so.

C. Appropriateness of Care

“Appropriateness” can be loosely defined as “not too much,” “not too little,” and “the right” care, i.e., the avoidance of over-treatment, under-treatment, and mistreatment. In addition, the most appropriate treatment may be no treatment at all, or self-treatment by the patient rather than treatment by a separate provider.

This area has been the focus of the largest body of research and discussion in terms of the influences of payment systems.

Problem 3.1: Current episode of care payment systems are generally based on the average costs that providers report incurring in delivering care, rather than the costs associated with providing high-quality, efficient care.

Depending on the level of quality and efficiency of the care on which cost estimates are based, the payment levels in episode of care payment systems (e.g., DRGs) may be higher or lower than necessary to cover the costs of high-quality care.

Problem 3.2: Many health care providers explicitly rely on payments that significantly exceed costs for certain conditions/patients in order to offset losses incurred on other conditions/patients where payments do not cover the costs of care.

As a result, there is resistance by providers to reducing charges (i.e., costs to payers) where it is feasible to do so because of the provider's dependency on the cross-subsidy involved. At the same time, this creates incentives for the creation of specialty hospitals and clinics focusing only on the high-margin patients and conditions.

Problem 3.3: Certain types of providers or services (e.g., nurse practitioners, pharmacists, etc.) may not be covered separately under payment systems, even though they are licensed to provide the care, reducing the likelihood that they will be used even if they are more appropriate than providers/services covered.

For example, although close attention to appropriate medication management during and following inpatient care has been shown to improve outcomes and reduce readmissions, pharmacists and pharmacy services are not separately paid for under most payment systems.

Problem 3.4: Fee-for-service systems financially penalize providers for eliminating services that do not improve outcomes.

Problem 3.5: Fee-for-service payment systems reward providers for unnecessary services and low-value services.

As it is often described, the fee-for-service payment system is “weighted toward intervention.”

- Problem 3.6:** Many payment systems not only provide higher reimbursements for more expensive procedures, but higher margins over providers' costs. Studies have shown that relatively lower reimbursement is provided for services involving primarily cognitive skills (e.g., patient assessment and counseling, and prevention services) than services involving procedural skills (e.g., surgery and other invasive procedures), which also involve expensive equipment and facilities.
- Problem 3.7:** Payment is made to whichever inpatient care facility is chosen by a patient's physician (or by the patient, based on where the physician practices), in many cases without regard to cost and/or quality.
- Problem 3.8:** For choices about preference-sensitive care, payment rates can create financial incentives and disincentives for providers to influence particular choices by patients.
- For example, if a patient has a choice between medical management and surgery to address a particular condition, a surgeon may have a financial disincentive to explain the benefits of medical management vs. surgery in an unbiased fashion.
- Problem 3.9:** Providing palliative care, rather than treatment, to patients in the final stages of terminal illnesses can reduce costs and improve patient comfort, but current payment systems often reward expensive treatment measures in the final stages of life.
- This problem is also related to the problems of inaccurate prognosis described earlier—a provider may be rewarded financially for providing the treatment selected in response to an overly optimistic prognosis.
- Problem 3.10:** Payment systems generally pay for services regardless of whether the provider performs all of the processes recommended in clinical practice guidelines.
- Despite the presumed incentives in the fee-for-service system for physicians to provide maximum treatment, studies have shown that patients receive only about half of the care processes viewed as desirable or essential. This may be because these processes are not reimbursed separately (see [Section II-B](#)).

- Problem 3.11:** Episode-of-care payment systems can financially penalize providers for adding components of care that could improve long-term outcomes but increase short-term direct costs.
- Problem 3.12:** Episode-of-care payment systems financially penalize providers for accepting patients with above-average treatment needs within a particular diagnosis/severity category and for uncontrollable costs of drugs and medical devices, unless the patient's care is expensive enough to justify an outlier payment.
- Problem 3.13:** Capitation payment systems financially penalize providers for accepting patients with above-average treatment needs and for uncontrollable costs of drugs, medical devices, etc.
- Problem 3.14:** Payment systems reinforce fragmentation of care by paying multiple providers for elements of the same episode of care for the same patient, regardless of whether the care is coordinated or duplicative.
- Problem 3.15:** Different providers (e.g., hospitals and physicians) are generally paid separately and through different payment systems with different incentives.

A hospital seeking to improve quality or reduce costs of inpatient acute care may not be able to do so without the cooperation of physicians (who may be financially penalized for doing so under a fee-for-service payment system). Physicians who seek to improve quality of inpatient acute care may not be able to do so without the cooperation of the hospital (which may be financially penalized under a per diem or DRG-type system for doing so).

- Problem 3.16:** For hospital care, physicians order the use of drugs or devices, but the costs associated with those drugs and devices are typically incurred by the hospital and must be absorbed within the payment made to the hospital, not by the physician.
- Problem 3.17:** Patients and/or families may request or demand expensive drugs, devices, or procedures that may not be appropriate but which may increase the cost of care, without any financial penalty for doing so.
- Problem 3.18:** Many payers do not have mechanisms for encouraging or directing patients to providers which provide care at lower cost (for the same quality) or higher quality (at the same cost).

Because of this, there is no financial incentive for a provider to charge a payer less for care, since there may be no practical way for the provider to offset the lost revenue with a greater volume of patients.

Problem 3.19: Payment systems do not explicitly reward providers for reducing indirect costs of care, such as length of time away from work (e.g., a worker's length of stay in the hospital, time spent waiting for a doctor's appointment or testing, etc.).

D. Avoidance of Adverse Events

A considerable literature has developed regarding the frequency and causes of adverse events due to provider errors or neglect. However, there have been relatively few efforts to study the impacts of such adverse events on costs and payments, and relatively few explicit changes in payment systems to address them.

Problem 4.1: Under most payment systems, providers are paid regardless of whether patients experience adverse events under their care.

Problem 4.2: Under most payment systems, providers are paid more for patients experiencing adverse events, particularly serious adverse events resulting in multiple complications.

Although some studies have reported that the increased payments to hospitals for adverse events are not sufficient to cover the increased costs of care, more recent research suggests that reducing adverse events that occur at low rates may negatively impact hospital margins. Physicians paid under fee-for-service arrangements will likely receive additional fees for additional care of patients who experience adverse events.

Problem 4.3: Providers may benefit financially if they can shift the care of patients experiencing adverse events to other providers. For example, long-term care facilities are paid for the care they provide regardless of whether adverse events occur that may lead to hospitalization or other forms of health care; moreover, provisions for "bed holding payments" can increase payments to long-term care facilities when patients experience adverse events that require (or can qualify for) hospitalization.

E. Follow-Up to Care

For many types of conditions, the full course of care does not occur within the boundaries of a single provider. For example, a hospital patient may be discharged to home health care for certain kinds of therapies. Moreover, in general, following the completion of hospital care or care by a specialist, patients are expected to comply with post-discharge instructions under the supervision of their primary care physician. Some patients need long-term care in nursing homes, in assisted living facilities or programs, or in hospice programs following acute care.

- Problem 5.1:** Fee-for-service systems do not pay providers adequately for detailed discharge planning services.
- Problem 5.2:** Fee-for-service systems generally do not pay providers more to manage the needs of patients with complex conditions after discharge from the hospital or to proactively work to encourage and assist the patient in complying with post-discharge instructions.
- Problem 5.3:** Although poor medication compliance is a major contributor to hospital readmissions, most payment systems do not compensate pharmacists for effective medication management (either in addition to or instead of a primary care physician).
- Problem 5.4:** Most payment systems pay providers regardless of the quality of the discharge planning services.
- Problem 5.5:** Providers of follow-up care are paid for services regardless of whether they follow recommended processes or have poor outcomes.
- Problem 5.6:** Providers are paid regardless of whether problems occur after leaving their care that could reasonably have been prevented while under their care.
- Problem 5.7:** Providers may be rewarded financially if a patient experiences a problem after discharge from care (that could have been prevented during care) and then requires additional care by that provider.
- Problem 5.8:** Capitation payment systems financially penalize providers for care of patients with above-average treatment needs and for uncontrollable costs of drugs, medical devices, etc.
- Problem 5.9:** If providers are paid separately for their individual components of a sequence of care, earlier-stage providers may be financially rewarded (and later-stage providers penalized) if the earlier-stage providers discharge/transfer patients earlier or with more significant needs.

- Problem 5.10:** Patients generally do not experience financial penalties when their failure to adhere to post-discharge care recommendations results in the need for additional, costly care.
- Problem 5.11:** Payment systems may reward providers for increasing indirect costs of care, e.g., by imposing greater responsibilities for care on patients or family caregivers.

F. Efficiency and Cost Reduction

- Problem 6.1:** Many payers are reluctant to make changes in the payment levels for individual services or episodes of care, preferring to make across-the-board adjustments in a provider's payment levels, which leads to distortions in payments vs. costs.
- For example, DRG systems are based on relative weights for individual diagnoses times a base rate for the provider. Many payer-provider negotiations are limited to changing the amount of the base rate, rather than changing the weights for individual diagnoses; as a result, a provider that can deliver a particular service at lower cost cannot, in effect, charge less for that service without charging less for all services (or for a range of services that the payer groups together for adjustment).
- Problem 6.2:** Some payers prohibit paying for multiple procedures on the same day or during the same patient visit, which can discourage efficient and coordinated delivery of care.
- Problem 6.3:** Requirements that care be delivered by a physician during an office visit discourage the use of lower-cost health professionals and the use of communications techniques such as e-mail and phone calls that are lower in cost and easier for patients.
- Problem 6.4:** Payers (purchasers and plans) do not make patients aware of ways to reduce costs, or if they do, patients may view them as efforts to lower quality of care.
- Problem 6.5:** The existence of multiple methods of payment by different payers imposes significant administrative costs on providers, which increases the costs of care and reduces the time and resources available to devote to direct patient care.

Some payment systems are very different—for example, one payer may pay a hospital based on DRGs, while another may make per diem payments—while others may appear superficially similar, but are different in specific details (particularly recently with the growth in pay-for-performance incentives). Concerns about anti-trust issues can discourage payers and/or providers from agreeing on common systems of payment with common incentives and administrative requirements.

Problem 6.6: The existence of multiple methods of payment by different payers creates different sets of incentives for providers, which complicates the planning and management of patient care.

IV. CONCERNS REGARDING CURRENT PAY-FOR-PERFORMANCE SYSTEMS

A variety of concerns have been raised about the pay-for-performance systems and demonstration programs that have been established in an effort to address some of the problems described in [Section III](#). The following is a list of some of the major concerns that have been raised regarding these systems.

- Concern 1:** Current pay-for-performance systems do not directly address many of the problems described in Section III.
- Concern 2:** The amount of performance bonuses and penalties in most pay-for-performance systems is relatively small, reducing the likelihood they will overcome the problems they are intended to address.
- Concern 3:** When pay-for-performance programs create funding for bonuses in one type of service by reducing base payments across the board, it may force providers to cut back services in other areas, or encourage providers to shift costs by increasing charges to other payers.
- Concern 4:** If pay-for-performance systems provide additional funding for high or improved performance without reductions in base payment rates or penalties for poor performance, total costs may increase.
- Concern 5:** Pay-for-performance systems that provide rewards based on the level of compliance with recommended processes may not result in improved outcomes.
- Concern 6:** Pay-for-performance systems that provide rewards based on compliance with recommended processes may unintentionally deter innovation and experimentation with new processes that achieve better outcomes.
- Concern 7:** The reductions in a provider's net revenues from implementing a quality improvement initiative may exceed the payment incentives provided through a pay-for-performance system for that initiative.
- Concern 8:** Rewarding only the best-performing providers does not provide resources to cover the costs that lower-performing providers may incur in making efforts to improve.
- Concern 9:** Rewarding improvement on composite performance measures based on averages of performance on sub-measures may result in improvements on the easiest-to-improve sub-measures while performance worsens on other sub-measures.

- Concern 10:** Measures are only available for a subset of the processes that are important to good outcomes; pay-for-performance systems that reward a subset of processes may divert attention from other important processes.
- Concern 11:** Process measures in pay-for-performance systems are not applicable to all patients with a particular diagnosis, and are not available for many diagnoses.
- Concern 12:** Providing incentives based on outcomes (or even some processes) can create incentives for providers to exclude or under-treat patients who are likely to have poor outcomes or to be non-compliant with treatment regimes, or to over-treat patients who are likely to have better outcomes or be more compliant.
- Concern 13:** Because of the fragmentation of care, it is often difficult or impossible to clearly assign responsibility for performance or lack of performance to a particular provider. This makes it difficult to award or apportion incentive payments to particular providers.
- Concern 14:** A provider's costs of documenting compliance with processes and/or achievement of outcomes may exceed the amount of payment incentives the provider receives based on those performance measures.
- Concern 15:** Different pay-for-performance systems have different standards of performance, different incentives, and different reporting requirements, increasing administrative costs for providers and making it difficult for them to plan and manage care consistently for patients who have similar conditions but different payers.

V. POTENTIAL GOALS FOR EFFECTIVE VALUE-BASED HEALTH CARE PAYMENT SYSTEMS

In order to address the problems described in [Section III](#) and avoid the concerns about existing pay-for-performance systems described in [Section IV](#), the following are twelve potential goals that revised payment systems could seek to achieve.

- Goal 1:** Payment systems should enable and encourage providers to deliver accepted procedures of care to patients in a high-quality, efficient, and patient-centered manner.
- This goal is intended to address Problems 1.1, 1.2, 2.1, 3.1, 3.2, 5.1, 5.2, and 6.1, and Concerns 1 and 2.
- Goal 2:** Payment systems should support and encourage investments, innovations, and other actions by providers that lead to improvements in efficiency, quality, and patient outcomes and/or reduced costs.
- This goal is intended to address Problems 2.2, 3.3, 5.3, 6.2, and 6.3, and Concerns 6, 7, and 8.
- Goal 3:** Payment systems should not encourage or reward over-treatment, use of unnecessarily expensive services, unnecessary hospitalization or rehospitalization, provision of services with poor patient outcomes, inefficient service delivery, or encouraging choices about preference-sensitive services that are not compatible with patient desires.
- This goal is intended to address Problems 2.3, 2.4, 3.4, 3.5, 3.6, 3.7, 3.8, and 3.9, and Concerns 4 and 5.
- Goal 4:** Payment systems should not reward providers for under-treatment of patients or for the exclusion of patients with serious conditions or multiple risk factors.
- This goal is intended to address Problems 3.10, 3.12, 3.13, 5.4, 5.5, and 5.8, and Concerns 9, 10, 11, and 12.
- Goal 5:** Payment systems should not reward provider errors or adverse events.
- This goal is intended to address Problems 2.5, 2.6, 2.7, 4.1, 4.2, 5.6, and 5.7.

- Goal 6:** Payment systems should make providers responsible for quality and costs within their control, but not for quality or costs outside of their control.
- This goal is intended to address Problems 3.12 and 3.13 and Concern 13.
- Goal 7:** Payment systems should support and encourage coordination of care among multiple providers, and should discourage providers from shifting costs to other providers without explicit agreements to do so.
- This goal is intended to address Problems 3.14, 3.15, 3.16, 4.3, and 5.9, and Concern 13.
- Goal 8:** Payment systems should encourage patient choices that improve adherence to recommended care processes, improve outcomes, and reduce the costs of care.
- This goal is intended to address Problems 1.3, 2.8, 3.17, 3.18, 5.10, and 6.4.
- Goal 9:** Payment systems should not reward short-term cost reductions at the expense of long-term cost reductions, and should not increase indirect costs in order to reduce direct costs.
- This goal is intended to address Problems 1.4, 3.11, 3.19, and 5.11.
- Goal 10:** Payment systems should not encourage providers to reduce costs for one payer by increasing costs for other payers, unless the changes bring payments more in line with costs for both payers.
- This goal is intended to address Problem 3.2 and Concern 3.
- Goal 11:** Payment systems should minimize the administrative costs for providers in complying with payment system requirements.
- This goal is intended to address Problem 6.5 and Concerns 14 and 15.
- Goal 12:** Different payers should align their standards and methods of payment in order to avoid unnecessary differences in incentives for providers.
- This goal is intended to address Problem 6.6 and Concern 15.

VI. CREATING A VALUE-BASED HEALTH CARE PAYMENT SYSTEM

This section and the following three sections ([VII](#), [VIII](#), and [IX](#)) define specific issues that need to be resolved in order to achieve the goals defined in [Section V](#), as well as specific options for resolving them.

This section deals with issues associated with Question #1 defined in the introduction: *What changes should be made in current health care payment systems in order to eliminate (or significantly reduce) the current penalties and disincentives for higher-quality, lower-cost health care?*

Four Groups of Patients/Conditions

Because the nature of the providers and care is so different across the four categories of patients/conditions defined in [Section II-C](#), the core payment issues are defined and discussed separately for each of them:

- [Subsection VI-A](#) addresses how payment could be structured for *care of major acute episodes*, i.e., conditions such as heart attack, stroke, premature delivery, newly diagnosed invasive cancer, or major trauma, that are characterized by the patient needing a complex mix of often expensive interventions within a relatively brief period of time.
- [Subsection VI-B](#) addresses how payment could be structured for *care of chronic conditions*, i.e., conditions such as diabetes, hypertension, heart failure, asthma, etc.
- [Subsection VI-C](#) addresses how payment could be structured for *care of minor acute episodes*, i.e., minor wounds, normal childbirth, minor respiratory diseases, etc.
- [Subsection VI-D](#) addresses how payment could be structured for *preventive care*, i.e., immunizations, screening tests, counseling, etc., designed to prevent chronic conditions and some acute episodes.

As noted in [Section II-C](#), there are significant differences among patients and conditions even within these four categories, and some of these may warrant differences in payment systems.

Five Categories of Issues

In Part 1 of each subsection, five categories of issues are addressed:

1. What basic method of payment should be used to compensate providers for this type of care;
2. Whether payments for multiple providers should be “bundled” together;

3. How the actual level of payment should be determined;
4. What performance standards should be set and whether incentives for performance should be added to the basic payment method; and
5. Whether specific incentives should be provided to patients regarding choice of providers and participation in care.

Examples of Restructured Payment Systems

In Part 2 of each subsection, an example of a possible payment system is described, incorporating options from each of the issues. *The reader may find it helpful to read Part 2 in each subsection first* in order to get a broad overview of the kinds of elements which need to be combined for payment restructuring, before reviewing the specific issues and options in Part 1.

Details of Reward/Incentive Systems

[Section VII](#) deals with issues associated with the second key question defined in the introduction: *What additional rewards or incentives, if any, should be included in health care payment systems in order to encourage higher-quality, lower-cost health care?* Each of the subsections in [Section VI](#) asks generally *whether* incentives should be provided, but leaves to Section VII the issues of *how* those incentives should be structured.

Other Issues

[Section VIII](#) deals with mechanisms for establishing categories of diagnosis and patient severity, guidelines of care, costs, measures of performance, etc., which are necessary for either basic payment systems or for incentive systems.

And finally, [Section IX](#) deals with an overarching critical issue: Regardless of what payment system(s) are defined, what process can payers use to facilitate successful implementation?

A. Creating a Value-Based Payment System for Care of Major Acute Episodes

This subsection focuses on how payers should pay for *care of major acute episodes*, i.e., conditions such as heart attack, stroke, premature delivery, newly diagnosed invasive cancer, or major trauma, that are characterized by the patient needing a complex mix of often expensive interventions within a relatively brief period of time (see [Section II-C](#)).

This subsection is divided into 13 different issues within five groups that need to be addressed in order to achieve the goals proposed in [Section V](#):

Basic Payment Method

- 1.1 What basic method should be used to pay providers for care of major acute episodes?

Bundling of Payment

- 1.2 Should payers bundle together episode-of-care payments to hospitals and to the physicians managing the hospital care for major acute episodes into a single payment?
- 1.3 Should payers bundle together episode-of-care payments to hospitals and to post-acute care providers for major acute episodes into a single payment?
- 1.4 If payments are defined in bundles, should payers allocate bundled payments among providers, or should one accountable provider receive the payment and allocate it to other providers?
- 1.5 Should there be any restrictions on how profits/losses within a bundled payment are divided among providers?

Payment Levels

- 1.6 How should the base payment level be determined?
- 1.7 Should there be any adjustment in payment levels to reflect differences in costs for providers with special characteristics?
- 1.8 Should payment levels be adjusted for “outlier” cases?

Performance Standards

- 1.9 What level of service or performance should be required in order to receive the base payment level?
- 1.10 How should payments be changed when preventable adverse events (errors, infections, etc.) occur?
- 1.11 Should financial incentives beyond the basic payment level be provided for differences in performance?

Patient Incentives

- 1.12 How should patients be encouraged to choose high-quality/low-cost providers?
- 1.13 How should patients be encouraged or assisted to adhere to care processes that affect outcomes or costs?

Ways that the payments defined in this section might be modified at the margin to reward or penalize varying levels of performance will be discussed separately, in [Section VII](#).

For each issue, options for resolution are suggested. In most cases, there are many potential options for addressing an issue; an attempt has been made to identify options that differ along major conceptual dimensions, but the specifics of individual options will likely need to be modified or enhanced in order to insure that specific goals and concerns are addressed. In addition, options for a particular issue may not be mutually exclusive.

1. Key Issues and Options

Issue 1.1: What basic method should be used to pay providers for care of major acute episodes?

See [Section II-B](#) for a general description of the basic alternative payment systems.

Option 1.1.1: A single prospectively defined Episode-of-Care Payment (ECP) should be made to cover all of a hospital's services associated with an episode of care for a patient, with the amount adjusted for the severity/risk of the patient. Other non-physician services (e.g., home health agencies) should be paid in the same way. Physicians should be paid on a fee-for-service basis for the services they render as part of the episode of care.

Option 1.1.2: A single prospectively defined ECP should be made to cover all of a provider's services associated with an episode of care for a patient, with the amount adjusted for the severity/risk of the patient. All providers (hospitals, physicians, home health care agencies, etc.) and all costs (e.g., drugs and medical devices) involved in the episode of care should be paid on this basis.

This would be conceptually similar to the current PPS/DRG system used by Medicare to pay hospitals, although the bundling of payment, the determination of the base payment level, etc., could be different, as discussed below. This would be a significant change in payment for physicians.

Issue 1.2: Should episode-of-care payments to hospitals and to the physicians managing the hospital care for major acute episodes be bundled together into a single payment?

Currently, most payment systems are designed to pay each provider separately for the services they provide. A "bundled" payment means

that a single payment is defined to cover the services of two or more providers, with a goal of aligning incentives for all of the providers.

- Option 1.2.1: For major acute episodes, *separate payments* should be defined and made to the hospital and to the physician(s) managing the care.
- Option 1.2.2: For major acute episodes, *a single payment* should be defined for both the hospital and the physician(s) managing the hospital care for an episode of care.

Issue 1.3: Should episode-of-care payments to hospitals and to post-acute care providers for major acute episodes be bundled together into a single payment?

- Option 1.3.1: For major acute episodes, *separate payments* should be defined and paid to the hospital and any post-acute care providers associated with an episode of care.
- Option 1.3.2: For major acute episodes, *a single payment* should be defined for both the hospital and post-acute care providers associated with an episode of care.

Issue 1.4: If payments are defined in bundles, should payers allocate bundled payments among providers, or should one accountable provider receive the payment and allocate it to other providers?

- Option 1.4.1: If payments are defined in bundles, groups of providers should be *encouraged to create joint arrangements* for receiving and allocating a payment among themselves. However, where no such arrangement has been defined, payers should allocate the payment to individual providers based on a standard allocation determined during the process of setting the base payment level.

For example, if the base payment level for inpatient care is set on the assumption that 80% of the payment will cover hospital services and 20% of the payment will cover physician services, then unless the hospital and physician(s) have agreed that one of them (or a third party) will receive the entire payment and make different allocations among the group, the payer would pay 80% of the payment to the hospital and 20% to the physician(s).

- Option 1.4.2: If payments are defined in bundles, groups of providers should be *required to define a single accountable payee* for receiving and allocating a payment among themselves.
- Option 1.4.3: In the long run, if payments are defined in bundles, groups of providers should be *required to define a single accountable payee* for receiving and allocating a payment among themselves. However, in the short run, where no such arrangement has been defined, payers should allocate the payment to individual providers based on a standard allocation determined during the process of setting the base payment level. Incentives should be created to encourage groups of providers to create joint arrangements for receiving and allocating a payment among themselves.
- Issue 1.5: Should there be any restrictions on how profits/losses within a bundled payment are divided among providers?**
- Proposal 1.5: If payments are defined and paid in bundles, providers should be free to work out their own arrangements as to how any profits or losses incurred on a bundled payment should be divided among them. Currently, federal law restricts the ability of hospitals to share profits on services with physicians (commonly referred to as “gainsharing”). This law would likely need to be changed to accommodate this proposal.
- Issue 1.6: How should the base payment level be determined?**
- Option 1.6.1: For each combination of diagnosis and patient severity for which a separate ECP will be made, *providers should propose the amount of payment* (i.e., their “price” for the episode of care).
- Option 1.6.2: For each combination of diagnosis and patient severity for which a separate ECP will be made, *a national, state, or regional public–private collaborative (with representation from both payers and providers) should define a recommended set of best-practice services to be covered by the ECP and, where data are available, estimate the current cost for that set of services. Actual ECP levels would be determined through negotiations between providers and payers.*
- Option 1.6.3: For each combination of diagnosis and patient severity for which a separate ECP will be made, *a national, state, or regional public–private collaborative (with representation from both payers and providers) should*

determine a recommended payment level based on a study to estimate the cost of delivering good quality care for that category of diagnosis and severity (i.e., a “suggested price” for the episode of care). Providers would either accept the recommended payment level or propose a discount below (or premium above) the payment level that they will accept (i.e., their “price” for the episode of care) for that category of patient. Recommended base payment levels should differ from region to region based on the differences in cost-of-living by region, but providers should capture detailed cost differences in their discounts/premiums over the standard payment rate.

Options 1.6.1, 1.6.2, and 1.6.3 are each consistent with either a bidding model or a negotiation model of pricing; in each case, the provider proposes a price and the payer would either accept or reject the price. Options 1.6.2 and 1.6.3 would introduce a “starting point” for bidding or negotiations through the recommended payment level.

Option 1.6.4: For each combination of diagnosis and patient severity for which a separate ECP will be made, *a national, state, or regional public–private collaborative (with representation from both payers and providers) should determine the payment level based on a study to estimate the cost of delivering good quality care for that combination of diagnosis and severity. Payment levels should differ from region to region based on the differences in cost-of-living by region. Providers should accept the payment level as payment in full for the care provided to patients in that category.*

Establishing a uniform payment level across all providers and payers in a region will likely raise anti-trust concerns. A special ruling from the U.S. attorney general and state attorney(s) general, or legislation, may be needed to provide a safe harbor for such a pricing approach if appropriate benefits can be demonstrated.

Issue 1.7: Should there be any adjustment in payment levels to reflect differences in costs for providers with special characteristics?

Option 1.7.1: Base payment levels for episodes of care should be increased for providers with special characteristics that have been demonstrated to increase the average costs of care, such as teaching hospitals,

hospitals and other providers serving large numbers of low-income patients, etc.

Option 1.7.2: Base payment levels for episodes of care should not be adjusted for providers with special characteristics; however, payers should establish separate payments (or explicit premiums on payment levels) in each region to cover these costs.

Issue 1.8: Should payment levels be adjusted for “outlier” cases?

“Outlier” cases are patients for whom the level of services or costs associated with quality care are significantly higher than for other patients with the same diagnosis and ostensibly the same severity level. Fee-for-service and per diem payments inherently compensate providers more for this additional care, but episode-of-care and capitation systems do not, unless explicit provisions are made to do so. For example, Medicare’s inpatient hospital prospective payment system provides an outlier payment to a hospital if its charges/costs of care exceed a certain threshold above the DRG payment for a patient.

Option 1.8.1: When a provider documents that its *total costs of caring for a patient exceed a certain multiple of the base payment level* for that category of patient (based on diagnosis and severity), the provider should receive an additional payment to cover *a portion of those costs*. (Costs would be based on information provided on actual costs of care, rather than costs computed from charges.)

Option 1.8.2: When a provider documents that it was required to *provide services significantly beyond the level assumed in computing the base payment level*, the provider should receive an additional payment to cover *a portion of the documented out-of-pocket costs* associated with the additional care.

The distinction between Option 1.8.1 and Option 1.8.2 is that in the latter, the provider documents *services* performed beyond the normally expected level of services, rather than *costs* beyond the normally expected level of costs. (Costs may be higher than expected simply because of a higher cost structure at the provider, rather than because of a higher level of services provided.) Also, in Option 1.8.2, the outlier payment is based on out-of-pocket costs (e.g., medications, etc.) rather than total costs (e.g., allocations of overhead, salaries, etc.).

- Option 1.8.3: Some adjustment should be made for cases where the level of services required for quality care significantly exceeds typical or expected levels, if there is evidence that improved outcomes are being achieved through the higher levels of service.
- Option 1.8.4: No adjustment in payment should be made for patients requiring significantly more services or costs than were assumed in setting the base payment level, but such outlier cases should be documented and used by the payer and provider to adjust the diagnosis/severity categories (e.g., by adding a new severity level) and/or to adjust future base payment levels.
- Failure to provide any adjustment could violate Goal 4, by encouraging providers to avoid patients with unusually high care needs that are not effectively captured in the severity adjustment system.
- Issue 1.9: What level of service or performance should be required in order to receive the base payment level?**
- Because of concerns that many patients are not receiving elements of care that have been determined to be appropriate or necessary, most current pay-for-performance systems have an explicit or implicit goal of *encouraging*, but not *mandating*, that providers reach 100% compliance with certain processes that have been demonstrated to improve patient outcomes. However, an alternative approach would be to define processes where 100% compliance is considered *essential* (except where they are clearly contraindicated or where the patient is participating in a clinical trial explicitly to test new processes) and to *require* that those processes be performed in order to receive payment.
- Option 1.9.1: Payers and/or a public-private collaborative (involving both payers and providers) should define those processes that are considered mandatory for patients in a particular diagnosis/severity category, and providers should only be paid if those processes are delivered, unless there is clear documentation that the processes are contraindicated for the patient or if the patient is participating in a formal clinical trial of alternative processes.
- Option 1.9.2: No mandatory processes should be established in order for providers to receive payment.

Issue 1.10: How should payments be changed when preventable adverse events (errors, infections, etc.) occur?

Option 1.10.1: Providers *should not be paid more* for care needed to address preventable adverse events or the complications resulting from such events.

Option 1.10.2: Providers *should be paid for care* needed to address preventable adverse events, but *payment bonuses or penalties should be provided* based on the rates of preventable adverse events.

Issue 1.11: Should financial incentives beyond the basic payment level be provided for differences in performance?

Option 1.11.1: Specific financial incentives *should not be provided* to providers; instead, comparative information for payers and patients on performance levels and prices should be used to drive improvements in performance.

Option 1.11.2: Specific financial incentives *should be provided* for those aspects of care for which the payment system provides inadequate incentives or undesirable disincentives.

[Section II-B](#) discusses the areas where incentives may be needed. The detailed issues and options for how to implement specific financial incentive programs are discussed in [Section VII](#).

Issue 1.12: How should patients be encouraged to choose high quality/low-cost providers?

Option 1.12.1: Patients should be *given complete discretion to choose providers*, using available information on quality and cost of providers as they wish.

Option 1.12.2: Payers should give patients *financial incentives* (e.g., lower copays or co-insurance amounts) for using providers with higher quality and/or lower cost.

Option 1.12.3: Payers should give patients *financial disincentives* (e.g., higher copays or co-insurance amounts) for using providers with lower quality and/or higher cost.

Option 1.12.4: Payers should *refuse to pay for care by the lowest quality and highest cost providers, unless the care is provided in emergency circumstances*.

See [Section VIII](#) for issues regarding the development and dissemination of quality and cost information.

Issue 1.13: How should patients be encouraged or assisted to adhere to care processes that affect outcomes or costs?

Patient preferences and patient adherence as well as provider preferences and performance can have a significant impact on outcomes and costs. For example, research has indicated that a major cause of patients being readmitted to the hospital after discharge for treatment of a major acute episode is failure to comply with post-discharge instructions. This may be due to poorly explained or unrealistic expectations by the hospital or the patient's physician(s), but it can also be due to patient factors outside of the control of the hospital and physicians.

Option 1.13.1: *Payers* should provide financial incentives to *patients* (e.g., bonuses or reduced copays) for adherence with care processes recommended or required by their health care provider.

Option 1.13.2: *Payers* should provide financial incentives to *providers* based on the level of patient involvement in care planning and/or patient adherence with care processes.

Option 1.13.3: *Providers* should give financial incentives to *patients* (e.g., bonuses or reduced copays) for adherence with care processes recommended or required by the provider.

Option 1.13.4: Providers should establish *proactive systems for educating, monitoring, and encouraging patient adherence*, but *no explicit financial incentives* should be provided to patients.

Combinations of these options can also be considered.

2. Example of a Possible Payment System for Care of Major Acute Episodes

The following is just one example of how the options from the issues described above could be combined into a new method of payment for care of major acute episodes.

Method of Payment

- A single prospectively defined episode-of-care payment (ECP) would be made to cover all of a provider's services associated with an episode of care for a patient, with the amount adjusted for the severity/risk of the patient. All providers (hospitals, physicians, home health care agencies, etc.) and all costs (e.g., drugs and medical devices) involved in the episode of care would be paid from this single payment.

Defining a Recommended Base Payment Amount

- A recommended ECP amount would be established by a regional public-private collaborative (involving both payers and providers) for each combination of a diagnosis and patient severity level.
- The recommended ECP amount would be based on the estimated cost of delivering all elements of the Clinical Practice Guideline (where one exists) for that diagnosis/severity level, plus a “warranty factor” to cover adverse events. The warranty factor would be computed as the current lowest rate of adverse events for that diagnosis/severity combination among providers times the estimated average cost of treating the adverse events.
- The ECP would include the estimated costs of services by all providers involved in the episode of care, along with a standard allocation of the payment to individual providers based on the proportion of the overall cost attributable to each provider.

Defining the Actual Base Payment Amount

- Providers or groups of providers would define and announce their actual ECP or portion of an ECP (i.e., their “price”) for a particular diagnosis/severity combination as a percentage of the suggested ECP. Providers could charge different amounts to different payers, including individuals self-paying for care.
- Groups of providers could agree to share the ECP in any way they wished, either based on the standard allocation or a different allocation (e.g., based on cost savings achieved beyond the estimated costs of care). In the absence of such an agreement, the payer would pay each provider a standard allocation of the ECP times the provider’s percentage discount/premium.

Conditions for Receiving the Base Payment Amount

- Patients would be entered into a regional registry so that outcomes could be tracked for purposes of measuring performance.
- Retroactive adjustments to payments would be made for cases where all mandatory care elements of the Clinical Practice Guideline for patients of that diagnosis/severity had not been provided, unless certification were given by an appropriate physician that the excluded elements of care were contraindicated in that patient’s case or that the patient was participating in a clinical trial.

- Providers would not be paid for additional episodes of care nor otherwise be paid extra for care needed to address preventable adverse events or the complications resulting from such events.
- Providers would be required to accept all patients in a particular diagnosis/severity combination from a particular payer in order to accept any patients of that type.

Adjustments to the Base Payment Amount

- The recommended ECP amount would be adjusted periodically in response to updates in Clinical Practice Guidelines, the discounts offered by providers, new technologies, inflation, etc.
- Providers would be permitted to revise their actual ECP rates upward at most yearly, but would be encouraged to revise them downward whenever possible.
- No adjustment in payment would be made for patients requiring significantly more services or costs than were assumed in computing the base payment level, but the outlier cases would be documented and used to adjust the diagnosis and severity categories and/or future base payment levels in the next year.
- Payers in a region would contribute funding to a pool on a formula basis for the purpose of making additional payments to teaching hospitals to cover the additional costs of medical education.

Performance Measurement and Incentives

- The providers of services under the ECP would report publicly on the outcomes they achieve for patients paid for under that ECP and on their level of compliance with non-mandatory processes under the Clinical Practice Guideline.

Encouraging Patients to Promote Quality and Cost Containment

- Payers would refuse to pay for care at the lowest-quality, highest-cost providers except under emergency circumstances. Patients choosing to use those providers, except in an emergency, would be liable to pay the full costs of care.
- Patients using the highest-quality, lowest-cost providers would have a significantly reduced copayment amount and/or receive financial rebates.
- Patients would receive financial rebates from the payer for compliance with care processes recommended by the provider.

B. Creating a Value-Based Payment System for Care of Chronic Conditions

This section focuses on how payers should pay for *care of chronic conditions*, i.e., conditions such as diabetes, hypertension, heart failure, asthma, etc. (see [Section II-C](#)).

There is growing agreement that people with chronic conditions require a different type of care than is typically associated with the major acute episode discussed in [Subsection VI-A](#). However, even within the broad category of chronic conditions, there are very different categories of patients requiring different types of care (see [Section II-C](#)). How care of this broad range of patients should be paid for is the subject of this subsection.

This section is divided into nine different issues in five categories that need to be addressed in order to achieve the goals proposed in the previous section:

Basic Payment Method

- 2.1 What basic payment method should be used to pay providers for care of chronic conditions?

Bundling of Payment

- 2.2 Should payments to medical care managers and other providers providing care related to chronic conditions be bundled together into a single payment to one accountable provider?

Payment Levels

- 2.3 If a fee-for-service payment system is used, how should the fee levels be determined?
- 2.4 If a care management payment (CMP) system is used, how should the base payment level be determined?
- 2.5 Should payment levels be adjusted for “outlier” cases?

Performance Standards

- 2.6 What level of service or performance should be required in order to receive the base payment level?
- 2.7 Should financial incentives beyond the basic payment level be provided for differences in performance?

Patient Incentives

- 2.8 How should patients be encouraged to choose high-quality/low-cost providers?
- 2.9 How should patients be encouraged or assisted to adhere to care processes that affect outcomes or costs?

Ways that the payments defined in this section might be modified at the margin to reward or penalize varying levels of performance will be discussed separately, in [Section VII](#).

For each issue, options for resolution are suggested. In most cases, there are many potential options for addressing an issue; an attempt has been made to identify options that differ along major conceptual dimensions, but the specifics of individual options will likely need to be modified or enhanced in order to insure that specific goals and concerns are addressed. In addition, options for a particular issue may not be mutually exclusive.

1. Key Issues and Options

Issue 2.1: What basic payment method should be used for care of chronic conditions?

Option 2.1.1: For care of chronic conditions, the patient's primary care physician should be paid on a *fee-for-service basis*. Fees for care management services should (1) be sufficient to cover time spent counseling patients and conducting compliance monitoring/encouragement, (2) not be restricted to services provided by a physician in a face-to-face visit, and (3) allow multiple services to be provided on the same day/in the same visit. Other providers should also be paid on a fee-for-service basis, except for major acute episodes associated with the chronic condition, which would be paid as specified in [Section VI-A](#).

Option 2.1.2: For care of chronic conditions, a medical care manager should be paid a single, periodic, prospectively defined Care Management Payment (CMP) to cover *all of the care management services* associated with that chronic condition, with the amount adjusted for the severity/risk of the patient. *The medical care manager or other providers should be paid separately for preventive care and care of minor acute episodes provided beyond basic care management. Major acute episodes and long-term care associated with the chronic condition would be paid separately.*

The medical care manager could be a physician or a practice staffed by a team of health care professionals.

The American College of Physicians (ACP) has proposed an “advanced medical home” model, in which patients have a personal physician working with a team of health care professionals. According to ACP, for most patients the personal physician would most appropriately be a primary care physician, but it could be a specialist or sub-specialist for patients requiring ongoing care for certain conditions, e.g., severe asthma, complex diabetes, complicated cardiovascular disease, rheumatologic disorders, and malignancies. In the ACP model, rather than being a “gatekeeper” who restricts patient access to services, the personal physician would coordinate and facilitate the patient’s care by using evidence-based medicine and clinical decision support tools, by creating an integrated, coherent plan for ongoing medical care in partnership with the patient and their families, by providing enhanced and convenient access to care not only through face-to-face visits but also via telephone, e-mail, and other modes of communication, by identifying and measuring key quality indicators to demonstrate continuous improvement in health status indicators for individuals and populations treated, and by adopting and implementing the use of health information technology to promote quality of care, to establish a safe environment in which to receive care, to protect the security of health information, and to promote the provision of health information exchange.

Option 2.1.3: For care of chronic conditions, a medical care manager should be paid a single, periodic, prospectively defined care management payment (CMP) to cover *all of the care management, preventive care, and minor acute care services* associated with that chronic condition, with the amount adjusted for the severity/risk of the patient. *Major acute episodes and long-term care associated with the chronic condition would be paid separately.*

Option 2.1.4: For care of chronic conditions, a medical care manager should be paid a single, periodic, prospectively defined CMP to cover *all of the care* associated with that chronic condition, *including preventive care, minor acute care, and any major acute episodes*, with the amount adjusted for the severity/risk of the patient. *Long-term care associated with the chronic condition would be paid separately.*

Option 2.1.5: For care of chronic conditions, a medical care manager should be paid a single, periodic, prospectively defined CMP to cover *all of the care* associated with that chronic condition, *including preventive care, minor acute care, any major acute episodes, and any long-term care services (e.g., nursing home or home health care)*, with the amount adjusted for the severity/risk of the patient.

Issue 2.2: Should payments to medical care managers and other providers supplying care related to chronic conditions be bundled together into a single payment to one accountable provider?

Currently, most payment systems are designed to pay each provider separately for the services they provide. A “bundled” payment means that a single payment is defined to cover the services of two or more providers.

Option 2.2.1: For care of chronic conditions, *separate payments* should be defined and made to the medical care manager and any other providers involved in supplying the types of care defined in Issue 2.1.

Option 2.2.2: For care of chronic conditions, a *single payment* should be defined and paid to the medical care manager *for the services of all physicians, medical practices, and diagnostic services* involved in providing the types of care defined in Issue 2.1.

Option 2.2.3: For care of chronic conditions, a single payment should be defined and paid to the medical care manager *for the services of all other providers* involved in supplying the types of care defined in Issue 2.1.

For example, under Option 2.2.2, the medical care manager could be paid a single payment to cover the costs of both services provided directly by the medical care manager and by diagnostic laboratories, etc. Under Option 2.2.3, for a patient requiring long-term care services (whether in a nursing home or in a community setting with home health care), a single payment would be defined to cover the costs of physician care, long-term care, and any hospitalizations.

Issue 2.3: If a fee-for-service system is used, how should the fee levels be determined?

Option 2.3.1: Fee levels should be based on the current Resource-Based Relative Value Scale (RBRVS) used by Medicare, but the relative values for

care management services should be increased significantly to reflect the need for more intensive patient management services for persons with chronic conditions.

Option 2.3.2: A national, state, or regional public–private collaborative (with representation from both payers and providers) should determine proposed fee levels for care management services. Fee levels for other services should be based on the current RBRVS used by Medicare. Individual providers could propose fee levels above or below the proposed level.

Issue 2.4: If a care management payment (CMP) system is used, how should the base payment level be determined?

Option 2.4.1: For each combination of diagnosis and patient severity for which a separate CMP will be made, *providers should propose the amount of payment* (i.e. their “price” for the management of care).

Option 2.4.2: For each combination of diagnosis and patient severity for which a separate CMP will be made, *a national, state, or regional public–private collaborative (with representation from both payers and providers) should define a recommended set of best-practice services to be covered by the CMP and, where data are available, estimate the current cost for that set of services. Actual CMP levels would be determined through negotiations between providers and payers.*

Option 2.4.3: For each combination of diagnosis and patient severity for which a separate CMP will be made, *a national, state, or regional public–private collaborative (with representation from both payers and providers) should determine a recommended payment level based on a study to estimate the cost of delivering good quality care for that category of diagnosis and severity (i.e., a “suggested price” for the management of care). Providers should either accept the recommended payment level, or propose a discount below (or premium above) the payment level that they will accept* (i.e., their “price” for the management of care) for patients in that category.

For example, Allan Goroll and colleagues have proposed calculating a payment level for primary care providers based on a budget reasonably expected to cover the personnel and operating expenses for a primary care practice, divided by the number of patients of a

particular need/risk level the practice could be expected to manage. (See “Fundamental Reform of Payment for Adult Primary Care: Comprehensive Payment for Comprehensive Care,” by Allan H. Goroll, Robert A. Berenson, Stephen C. Schoenbaum, and Laurence B. Gardner, *Journal of General Internal Medicine*, 2007.)

Options 2.4.1, 2.4.2, and 2.4.3 are each consistent with either a bidding model or a negotiation model of pricing; in each case, the provider proposes a price and the payer would either accept or reject the price. Options 2.4.2 and 2.4.3 would introduce a “starting point” for bidding or negotiations through the recommended payment level.

- Option 2.4.4: For each combination of diagnosis and patient severity for which a separate CMP will be made, *a national, state, or regional public–private collaborative (with representation from both payers and providers) should determine a payment level* based on a study to estimate the cost of delivering good quality care for that combination of diagnosis and severity. *Providers should accept the payment level as payment in full for the care provided to patients in that category.*

Establishing a uniform payment level across all providers and payers will likely raise anti-trust concerns. A special ruling from the U.S. attorney general and state attorney(s) general, or legislation, may be needed to provide a safe harbor for such a pricing approach if appropriate benefits can be demonstrated.

Issue 2.5: Should payment levels be adjusted for “outlier” cases?

“Outlier” cases are patients for whom the level of services or costs associated with quality care is significantly higher than for other patients with the same diagnosis and ostensibly the same severity level. Fee-for-service and per diem payments inherently compensate providers more for this additional care, but a CMP system would not, without explicit provisions to do so.

- Option 2.5.1: When a provider documents that its *total cost of caring for a patient exceeds a certain multiple of the base payment level* for that category of patient (based on diagnosis and severity), the provider should receive an *additional payment to cover a portion of those costs.*

Option 2.5.2: When a provider documents that it was required to *provide services significantly beyond the level assumed in computing the base payment level*, the provider should receive an *additional payment to cover a portion of the documented out-of-pocket costs* associated with the additional care.

The distinction between Option 2.5.1 and Option 2.5.2 is that in the latter, the provider documents *services* performed beyond the normally expected level of services, whereas in the former, the provider documents *costs* beyond the normally expected level of costs. Also, in the latter, the outlier payment is based on out-of-pocket costs (e.g., medications, etc.) rather than total costs (e.g., allocations of overhead, salaries, etc.).

Option 2.5.3: No adjustment in payment should be made for patients requiring significantly more services than were assumed in computing the base payment level, but such outlier cases should be documented and used by the payer and provider to adjust the diagnosis/severity categories (e.g., by adding a new severity level) and/or to adjust future base payment levels.

Failure to provide any adjustment could violate Goal 4, by encouraging providers to avoid patients with unusually high care needs that are not effectively captured in the severity adjustment system.

Issue 2.6: What level of service or performance should be required in order to receive the base payment level?

Because of concerns that many patients are not receiving elements of care that have been determined to be appropriate or necessary, most current pay-for-performance systems have an explicit or implicit goal of *encouraging*, but not *mandating*, that providers reach 100% compliance with certain processes that have been demonstrated to improve patient outcomes. However, an alternative approach would be to define processes where 100% compliance is considered essential (except where they are clearly contraindicated or where the patient is participating in a clinical trial explicitly to test new processes) and to *require* that those processes be performed in order to receive payment.

Option 2.6.1: Payers and/or a public-private collaborative (involving both payers and providers) should define those structures for care management

that are considered mandatory for patients in a particular age/severity category in order for a provider to receive CMP payments.

For example, providers might be required to have data systems and staffing levels adequate to support regular monitoring and follow-up of patients with chronic conditions.

- Option 2.6.2: Payers and/or a public–private collaborative (involving both payers and providers) should define those processes that are considered mandatory for patients in a particular age/severity category (either as part of an existing Clinical Practice Guideline, where one exists, or separately), and providers should only be paid if those processes are delivered, unless there is clear documentation that the processes are contra-indicated for the patient or if the patient is participating in a formal clinical trial of alternative processes.
- Option 2.6.3: No mandatory processes should be established in order for providers to receive payment.

Issue 2.7: Should financial incentives beyond the basic payment level be provided for differences in performance?

- Option 2.7.1: Specific financial incentives *should not be granted* to providers; instead, comparative information for payers and patients on performance levels and prices should be used to drive improvements in performance.
- Option 2.7.2: Specific financial incentives *should be granted* for those aspects of care for which the payment system provides inadequate incentives or undesirable disincentives.

[Section II-B](#) discusses the areas where incentives may be needed. The detailed issues and options for how to implement specific financial incentive programs are discussed in [Section VII](#).

Issue 2.8: How should patients be encouraged to choose high quality/low-cost providers?

- Option 2.8.1: Patients should be *given complete discretion to choose providers*, using available information on quality and cost of providers as they wish.
- Option 2.8.2: Payers should give patients *financial incentives* (e.g., lower copays or co-insurance amounts) for using providers with higher quality and/or lower cost.

Option 2.8.3: Payers should give patients *financial disincentives* (e.g., higher copays or co-insurance amounts) for using providers with lower quality and/or higher cost.

Option 2.8.4: Payers should *refuse to pay for care by the lowest quality and highest cost providers*.

Issue 2.9: How should patients be encouraged or assisted to adhere to care processes that affect outcomes or costs?

Option 2.9.1: *Payers* should provide financial incentives to *patients* (e.g., bonuses or reduced copays) for adherence with care processes recommended or required by their health care provider.

Option 2.9.2: *Payers* should provide financial incentives to *providers* based on the level of patient involvement in care planning and/or patient adherence with care processes.

Option 2.9.3: *Providers* should give financial incentives to *patients* (e.g., bonuses or reduced copays) for adherence with care processes recommended or required by the provider.

Option 2.9.4: *Providers* should establish *proactive systems for educating, monitoring, and encouraging patient engagement with treatment processes*. *Payers* should then provide incentives to *patients* (financial and non-financial) for adherence with care processes co-developed by patients and providers.

Option 2.9.5: *Providers* should establish *proactive systems for educating, monitoring, and encouraging patient adherence*, but *no explicit financial incentives* should be provided to patients.

2. Example of a Possible Payment System for Care of Chronic Conditions

The following is just one example of how the options from the issues described above could be combined into a new method of payment for care of chronic conditions.

Method of Payment

- A single provider would be designated as the medical care manager for a patient with a chronic condition and be paid a single, periodic, prospectively defined care management payment (CMP) to cover all of the care management, preventive care, and minor acute care services associated with that chronic condition, with the amount adjusted for the severity/risk of the patient. All providers and all costs associated

with this care would be covered by the single payment. Major acute episodes and long-term care associated with the chronic condition would be paid separately.

Defining a Recommended Base Payment Amount

- A recommended CMP amount would be established by a regional public-private collaborative (involving both payers and providers) for each combination of a diagnosis and patient severity level.
- The recommended CMP amount would be based on the estimated cost of delivering the care management, prevention, and minor acute care elements of the Clinical Practice Guidelines for that diagnosis/severity level (where one exists).
- The CMP would include the estimated costs of services by all providers involved in the episode of care.

Defining the Actual Base Payment Amount

- Providers or groups of providers would define and announce their actual CMP (i.e., their “price”) for patients in each diagnosis/severity level as a percentage of the recommended CMP. Providers could charge different amounts to different payers, including individuals self-paying for care.
- Groups of providers could agree to share the CMP in any way they wished.

Conditions for Receiving the Base Payment Amount

- Patients would be entered into a regional registry so that outcomes could be tracked for purposes of measuring performance.
- The CMP would be made on a monthly basis to the provider serving as the patient’s medical care manager in order to provide or coordinate the provision of all routine and preventive care associated with the diagnosed condition.
- Retroactive adjustments to payments would be made for cases where all mandatory care elements of the Clinical Practice Guideline for patients of that diagnosis/severity had not been provided, unless an appropriate physician certifies that the excluded elements of care were contraindicated in that patient’s case or that the patient was participating in a clinical trial.
- Payment would not depend on which provider or health care professional provided the care (as long as the professional was licensed to do so), or when or where the care was provided (e.g., in one office visit, multiple office visits, in the home, etc.).

Adjustments to the Base Payment Amount

- The recommended CMP amount would be adjusted periodically in response to updates in Clinical Practice Guidelines, the discounts offered by providers, new technologies, inflation, etc.
- Providers would be permitted to revise their actual CMP rates upward at most yearly, but would be encouraged to revise them downward whenever possible.
- No adjustment in payment would be made for patients requiring significantly more services or costs than were assumed in computing the base payment level, but the outlier cases would be documented and used to adjust the diagnosis and severity categories and/or future base payment levels in the next year.

Performance Measurement and Incentives

- The medical care manager would report publicly and receive a bonus payment based on the level of outcomes for patients paid for under the CMP and/or the level of provider compliance with non-mandatory processes under the Clinical Practice Guideline. One of the outcomes would be the number and severity of major acute episodes for the patients being managed by the medical care manager.
- The amount of the bonus would be based on a portion of the present value of avoided costs associated with the improved outcomes or process compliance. (For example, if the number of major acute episodes for patients declined, then the bonus payment would be based on a portion of the estimated cost of the avoided ECP payments.)

Encouraging Patients to Promote Quality and Cost Containment

- Patients using the highest-quality, lowest-cost providers would have a reduced copayment amount.
- Patients would also receive a financial reward based on adherence with both processes and outcomes (e.g., stopping smoking, getting immunizations, lowering cholesterol level) recommended by their medical care manager.

C. Creating a Value-Based Payment System for Care of Minor Acute Episodes

This section focuses on how payers should pay for *care of minor acute episodes*, i.e., minor wounds, normal childbirth, minor respiratory diseases, etc. (see [Section II-C](#)). Some conditions may be self-limiting or may not even require treatment, but some may be the early manifestation of something more serious or potentially more serious. This excludes

exacerbations of a condition that result in a major acute care episode, which are addressed in [Section VI-A](#).

This section is divided into nine different issues in five categories that need to be addressed in order to achieve the goals proposed in [Section V](#):

Basic Payment Method

- 3.1 What basic payment method should be used to pay providers for care of minor acute episodes?

Bundling of Payment

- 3.2 Should payments to all providers for minor acute episodes be bundled together into a single payment?

Payment Levels

- 3.3 If a fee-for-service payment or an episode of care payment is used, how should the base payment level be determined?
- 3.4 If a care management payment system is used, how should the base payment level be determined?

Performance Standards

- 3.5 What level of service or performance should be required in order to receive the base payment level?
- 3.6 How should payments be changed when preventable adverse events (errors, infections, etc.) occur?
- 3.7 Should financial incentives beyond the basic payment level be provided for differences in performance?

Patient Incentives

- 3.8 How should patients be encouraged to choose high-quality/low-cost providers?
- 3.9 How should patients be encouraged or assisted to adhere to care processes that affect outcomes or costs?

Ways that the payments defined in this section might be modified at the margin to reward or penalize varying levels of performance will be discussed separately, in [Section VII](#).

For each issue, options for resolution are suggested. In most cases, there are many potential options for addressing an issue; an attempt has been made to identify options that differ along major conceptual dimensions, but the specifics of individual options will likely need to be modified or enhanced in order to insure that specific goals and concerns are addressed. In addition, options for a particular issue may not be mutually exclusive.

1. Key Issues and Options

Issue 3.1: What basic payment method should be used for care of minor acute episodes?

Option 3.1.1: For care of minor acute episodes, any licensed provider should be paid on a *fee-for-service basis* to provide care for the condition.

Option 3.1.2: For minor acute episodes, a single prospectively defined *episode of care payment (ECP)* should be made to cover all of a provider’s services associated with that episode of care, with the amount adjusted for the severity/risk of the patient where there is likely to be a significant difference in cost.

Option 3.1.3: A single prospectively defined *care management payment (CMP)* should be paid to a primary care provider to cover all minor acute care given to all of the patients cared for by that provider, with the amount adjusted for the severity/risk of the patients cared for by that provider.

Issue 3.2: Should payments to all providers for minor acute episodes be bundled together into a single payment?

Currently, most payment systems are designed to pay each provider separately for the services they provide. A “bundled” payment means that a single payment is defined to cover the services of two or more providers, with a goal of aligning incentives for all of the providers.

Option 3.2.1: For minor acute episodes, *separate payments* should be defined and made to different providers involved with the care.

Option 3.2.2: For minor acute episodes, a *single payment* should be defined and paid to a primary care provider to cover the costs of *all of the physicians, physician practices, and diagnostic services* associated with the episode of care.

Option 3.2.3: For minor acute episodes, a *single payment* should be defined and paid to a primary care provider to cover the costs of *all providers* associated with the episode of care.

Issue 3.3: If a fee-for-service payment or an episode-of-care payment is used, how should the base payment level be determined?

Option 3.3.1: For each service for which a separate fee will be paid, or for each combination of diagnosis and patient severity for which a separate episode-of-care payment will be made, *providers should propose the amount of payment* (i.e. their “price” for the service or episode of care).

Option 3.3.2: For each service for which a separate fee will be paid, or for each combination of diagnosis and patient severity for which a separate episode-of-care payment will be made, *a national, state, or regional public-private collaborative (with representation from both payers and providers) should determine a recommended payment level* based on a study to estimate the cost of delivering good quality care for that service or for that category of diagnosis and severity (i.e., a “suggested price” for the service or episode of care). *Providers would either accept the recommended payment level, or propose a discount below (or premium above) the payment level that they will accept* (i.e., their “price” for the service or episode of care) for that category of patient. Proposed base payment levels should differ from region to region based on the differences in cost-of-living by region, but providers should capture detailed cost differences in their discounts/premiums over the standard payment rate.

Options 3.3.1 and 3.3.2 are both consistent with either a bidding model or a negotiation model of pricing; in each case, the provider proposes a price and the payer would either accept or reject the price. Option 3.3.2 would introduce a “starting point” for bidding or negotiations through the recommended payment level.

Option 3.3.3: For each service for which a separate fee will be paid, or for each combination of diagnosis and patient severity for which a separate episode-of-care payment will be made, *a national, state, or regional public-private collaborative (with representation from both payers and providers) should determine a payment level* based on a study to estimate the cost of delivering good quality care for that service or for that

combination of diagnosis and severity. Base payment levels should differ from region to region based on the differences in cost of living by region. *Providers should accept the payment level as payment in full for the care provided to patients in that category.*

Establishing a uniform payment level across all providers and payers in a region will likely raise anti-trust concerns. A special ruling from the U.S. attorney general and state attorney(s) general, or legislation, may be needed to provide a safe harbor for such a pricing approach if appropriate benefits can be demonstrated.

Issue 3.4: If a care management payment system is used, how should the base payment level be determined?

Option 3.4.1: For any particular mix of severity/risk for the patient population being served, *providers should propose the amount of payment* (i.e., their “price” for the management of care).

Option 3.4.2: For any particular mix of severity/risk for the patient population being served, *a national, state, or regional public–private collaborative (with representation from both payers and providers) should determine a recommended payment level* based on a study to estimate the cost of delivering good quality care for patients with that mix of risk/severity (i.e., a “suggested price” for the management of care). *Providers should either accept the recommended payment level, or propose a discount below (or premium above) the payment level that they will accept* (i.e., their “price” for the management of care) for patients with that mix.

Option 3.4.3: For any particular mix of severity/risk for the patient population being served, *a national, state, or regional public–private collaborative (with representation from both payers and providers) should determine a payment level* based on a study to estimate the cost of delivering good quality care for patients with that mix of risk/severity. *Providers should accept the payment level as payment in full for the care provided to patients with that mix.*

As with the previous issue, establishing a uniform payment level across all providers and payers in a region will likely raise anti-trust concerns. A special ruling from the U.S. attorney general and state attorney(s) general, or legislation, may be needed to provide a safe harbor for such a pricing approach if appropriate benefits can be demonstrated.

Issue 3.5: What level of service or performance should be required in order to receive the base payment level?

Because of concerns that many patients are not receiving elements of care that have been determined to be appropriate or necessary, most current pay-for-performance systems have an explicit or implicit goal of *encouraging*, but not *mandating*, that providers reach 100% compliance with certain processes that have been demonstrated to improve patient outcomes. However, an alternative approach would be to define processes where 100% compliance is considered essential (except where they are clearly contraindicated or where the patient is participating in a clinical trial explicitly to test new processes) and to *require* that those processes be performed in order to receive payment.

Option 3.5.1: Payers and/or a public-private collaborative (involving both payers and providers) should define those processes that are considered mandatory for patients in a particular diagnosis/severity category, and providers should be paid only if those processes are delivered, unless there is clear documentation that the processes are contraindicated for the patient or if the patient is participating in a formal clinical trial of alternative processes.

Option 3.5.2: No mandatory processes should be established in order for providers to receive payment.

Issue 3.6: How should payments be changed when preventable adverse events (errors, infections, etc.) occur?

Option 3.6.1: Providers should *not be paid more* for care needed to address preventable adverse events or the complications resulting from such events.

Option 3.6.2: Providers *should be paid* for care needed to address preventable adverse events, but *payment bonuses or penalties should be provided* based on the rates of preventable adverse events.

Issue 3.7: Should financial incentives beyond the basic payment level be provided for differences in performance?

Option 3.7.1: Specific financial incentives *should not be granted* to providers; instead, comparative information for payers and patients on performance levels and prices should be used to drive improvements in performance.

Option 3.7.2: Specific financial incentives *should be granted* for those aspects of care for which the payment system provides inadequate incentives or undesirable disincentives.

[Section II-B](#) discusses the areas where incentives may be needed. The detailed issues and options for how to implement specific financial incentive programs are discussed in [Section VII](#).

Issue 3.8: How should patients be encouraged to choose high-quality/low-cost providers?

Option 3.8.1: Patients should be *given complete discretion to choose providers*, using available information on quality and cost of providers as they wish.

Option 3.8.2: Payers should give patients *financial incentives* (e.g., lower copays or co-insurance amounts) for using providers with higher quality and/or lower cost.

Option 3.8.3: Payers should give patients *financial disincentives* (e.g., higher copays or co-insurance amounts) for using providers with lower quality and/or higher cost.

Option 3.8.4: Payers should *refuse to pay for care by the lowest quality and highest cost providers*.

Issue 3.9: How should patients be encouraged or assisted to adhere to care processes that affect outcomes or costs?

Option 3.9.1: *Payers* should give financial incentives to *patients* (e.g., bonuses or reduced copays) for adherence with care processes required or recommended by their health care provider.

Option 3.9.2: *Payers* should provide financial incentives to *providers* based on the level of patient involvement in care planning and/or patient adherence with care processes.

Option 3.9.3: *Providers* should give financial incentives to patients (e.g., bonuses or reduced copays) for adherence with care processes required or recommended by the provider.

Option 3.9.4: Providers should establish *proactive systems for educating, monitoring, and encouraging patient adherence, but no explicit financial incentives* should be provided to patients.

2. Example of a Possible Payment System for Care of Minor Acute Episodes

The following is just one example of how the options from the issues described above could be combined into a new method of payment for care of minor acute episodes.

Method of Payment

- A single prospectively defined episode-of-care payment (ECP) would be made to cover all of a provider's services associated with an episode of care for minor acute episodes, with the amount adjusted for the severity/risk of the patient where there is likely to be a significant difference in cost. All providers (hospitals, physicians, home health care agencies, etc.) and all costs (e.g., drugs and medical devices) involved in the episode of care would be paid from this single payment.

Defining a Recommended Base Payment Amount

- For those minor acute episodes for which a Clinical Practice Guideline has been established, a recommended ECP amount would be established by a regional public-private collaborative (involving both payers and providers) for each combination of a diagnosis and patient severity level.
- The recommended ECP amount would be based on the estimated cost of delivering all elements of the Clinical Practice Guideline for that diagnosis/severity level, plus a "warranty factor" to cover adverse events. The warranty factor would be computed as the current lowest rate of adverse events for that diagnosis/severity combination times the estimated average cost of treating the adverse events.
- The ECP would include the estimated costs of services by all providers involved in the episode of care, along with a standard allocation of the payment to individual providers based on the proportion of the overall cost attributable to each provider.

Defining the Actual Base Payment Amount

- Providers or groups of providers would define and announce their actual ECP or portion of an ECP (i.e., their "price") for a particular diagnosis/severity combination as a percentage of the suggested ECP. Providers could charge different amounts to different payers, including individuals self-paying for care.
- Where no suggested ECP had been established, providers would propose fee levels for their services.
- Groups of providers could agree to share the ECP in any way they wished, either based on the standard allocation or a different allocation (e.g., based on cost savings achieved beyond the estimated costs of care). In the absence of such an agreement,

the payer would pay each provider a standard allocation of the ECP times the provider's percentage discount/premium.

Conditions for Receiving the Base Payment Amount

- Patients would be entered into a regional registry so that outcomes could be tracked for purposes of measuring performance.
- Retroactive adjustments to payments would be made for cases where all mandatory care elements of the Clinical Practice Guideline for patients of that diagnosis/severity had not been provided, unless an appropriate physician certified that the excluded elements of care were contraindicated in that patient's case or that the patient was participating in a clinical trial.
- Providers would not be paid for additional episodes of care nor otherwise be paid extra for care needed to address preventable adverse events or the complications resulting from such events.

Adjustments to the Base Payment Amount

- The recommended ECP amount would be adjusted periodically in response to updates in Clinical Practice Guidelines, the discounts offered by providers, new technologies, inflation, etc.
- Providers would be permitted to revise their actual ECP rates upward at most yearly, but would be encouraged to revise them downward whenever possible.
- No adjustment in payment would be made for patients requiring significantly more services or costs than were assumed in computing the base payment level, but the outlier cases would be documented and used to adjust the diagnosis and severity categories and/or future base payment levels in the next year.

Performance Measurement and Incentives

- The providers of services under the ECP would report publicly on the outcomes they achieve for patients paid for under that ECP and on their level of compliance with non-mandatory processes under the Clinical Practice Guideline.

Encouraging Patients to Promote Quality and Cost Containment

- Payers would refuse to pay for care at the lowest-quality, highest-cost providers except under emergency circumstances. Patients choosing to use those providers, except in an emergency, would be liable to pay the full costs of care.

- Patients using the highest-quality, lowest-cost providers would have a significantly reduced copayment amount and/or receive financial rebates.
- Patients would receive financial rebates from the payer for compliance with care processes recommended by the provider.

D. Creating a Value-Based Payment System for Preventive Care

This section focuses on how payers should pay for *preventive care*, i.e., immunizations, screening tests, counseling, etc., designed to prevent chronic conditions and some acute episodes (see [Section II-C](#)).

This section is divided into seven different issues in five categories that need to be addressed in order to achieve the goals proposed in the previous section:

Basic Payment Method

- 4.1 What basic payment method should be used to pay providers for preventive care?

Bundling of Payment

- 4.2 Should payments to all providers for preventive care be bundled together into a single payment?

Payment Levels

- 4.3 How should the base payment level for a preventive care management payment (CMP) be determined?

Performance Standards

- 4.4 What level of service or performance should be required in order to receive the base payment level?
- 4.5 Should financial incentives beyond the basic payment level be provided for differences in performance?

Patient Incentives

- 4.6 How should patients be encouraged to choose high-quality/low-cost providers?
- 4.7 How should patients be encouraged or assisted to adhere to care processes that affect outcomes or costs?

Ways that the payments defined in this section might be modified at the margin to reward or penalize varying levels of performance will be discussed separately, in [Section VII](#).

For each issue, options for resolution are suggested. In most cases, there are many potential options for addressing an issue; an attempt has been made to identify options that differ along major conceptual dimensions, but the specifics of individual options will likely need to be modified or enhanced in order to insure that specific goals and concerns are addressed. In addition, options for a particular issue may not be mutually exclusive.

1. Key Issues and Options

Issue 4.1: What basic payment method should be used for preventive care?

Option 4.1.1: For preventive care, any licensed provider should be paid on a *fee-for-service basis for preventive care services*. Fees should (1) be sufficient to cover time spent counseling patients and conducting compliance monitoring/encouragement, (2) not be restricted to services provided by a physician in a face-to-face visit, and (3) allow multiple services to be provided on the same day/in the same visit.

Option 4.1.2: For preventive care, a preventive care manager should be paid a periodic, prospectively defined preventive Care Management Payment (CMP) to cover *a full range of preventive care services for an individual patient*, with the amount adjusted for the age/risk of the patient. In addition, the medical care manager should be paid on a fee-for-service basis for actual preventive services provided beyond basic care management (e.g., immunizations). These payments *would not be expected to cover either minor or major acute episodes, or prevention associated with management of a chronic condition, which would be covered under other payment systems*.

Option 4.1.3: For preventive care, a preventive care manager should be paid a periodic, prospectively defined preventive CMP to cover *a full range of preventive care services for an individual patient*, with the amount adjusted for the age/risk of the patient. This payment *would also be expected to cover all minor acute episodes, but not major acute episodes or services associated with management of a chronic condition, which would be covered under other payment systems*.

Option 4.1.4: For preventive care, a preventive care manager should be paid a periodic, prospectively defined preventive CMP to cover *a specific*

set of preventive care services for a group of individuals, with the amount adjusted for the characteristics of the group. The group of individuals might be defined geographically (e.g., a particular neighborhood or residential building) or by demographic group (e.g., senior citizens or teenagers).

Issue 4.2: Should payments to all providers for preventive care be bundled together into a single payment?

Currently, most payment systems are designed to pay each provider separately for the services they provide. A “bundled” payment means that a single payment is defined to cover the services of two or more providers, with a goal of aligning incentives for all of the providers.

Option 4.2.1: For preventive care, *separate payments* should be defined and made to different providers involved with the care.

Option 4.2.2: For preventive care, *a single payment* should be defined and paid to an accountable primary care provider to cover the costs of all of the providers involved with the preventive care.

Issue 4.3: How should the base payment level for a preventive care management payment (CMP) be determined?

Option 4.3.1: For each combination of patient age/risk for which a separate preventive care management payment will be made, *providers should propose the amount of payment* (i.e., their “price” for the management of care).

Option 4.3.2: For each combination of patient age/risk for which a separate preventive care management payment will be made, *a national, state, or regional public-private collaborative (with representation from both payers and providers) should determine a recommended payment level* based on a study to estimate the cost of delivering good quality care for that type of patient (i.e., a “suggested price” for the management of care). *Providers should either accept the recommended payment level, or propose a discount below (or premium above) the payment level that they will accept* (i.e., their “price” for the management of care) for patients in that category.

For example, Allan Goroll and colleagues have proposed calculating a payment level for primary care providers based on a budget reasonably expected to cover the personnel and operating expenses

for a primary care practice, divided by the number of patients of a particular need/risk level the practice could be expected to manage. (See “Fundamental Reform of Payment for Adult Primary Care: Comprehensive Payment for Comprehensive Care,” by Allan H. Goroll, Robert A. Berenson, Stephen C. Schoenbaum, and Laurence B. Gardner, *Journal of General Internal Medicine*, 2007.)

Options 4.3.1 and 4.3.2 are both consistent with either a bidding model or a negotiation model of pricing; in each case, the provider proposes a price and the payer would either accept or reject the price. Option 4.3.2 would introduce a “starting point” for bidding or negotiations through the recommended payment level.

Option 4.3.3: For each combination of patient age/risk for which a separate preventive care management payment will be made, *a national, state, or regional public–private collaborative (with representation from both payers and providers) should determine a payment level based on a study to estimate the cost of delivering good quality care for those types of patients. Providers should accept the payment level as payment in full for the care provided to patients in that category.*

Establishing a uniform payment level across all providers and payers in a region will likely raise anti-trust concerns. A special ruling from the U.S. attorney general and state attorney(s) general, or legislation, may be needed to provide a safe harbor for such a pricing approach if appropriate benefits can be demonstrated.

Issue 4.4: What level of service or performance should be required in order to receive the base payment level?

Because of concerns that many patients are not receiving elements of care that have been determined to be appropriate or necessary, most current pay-for-performance systems have an explicit or implicit goal of *encouraging*, but not *mandating*, that providers reach 100% compliance with certain processes that have been demonstrated to improve patient outcomes. However, an alternative approach would be to define processes where 100% compliance is considered essential (except where they are clearly contraindicated or where the patient is participating in a clinical trial explicitly to test new processes) and to *require* that those processes be performed in order to receive payment.

Option 4.4.1: Payers and/or a public–private collaborative (involving both payers and providers) should define those prevention processes that are considered mandatory for patients in a particular age/severity category, and providers should only be paid if those processes are delivered, unless there is clear documentation that the processes are contraindicated for the patient or if the patient is participating in a formal clinical trial of alternative processes.

Option 4.4.2: No mandatory processes should be established in order for providers to receive payment.

Issue 4.5: Should financial incentives beyond the basic payment level be provided for differences in performance?

Option 4.5.1: Specific financial incentives *should not be provided* to providers; instead, comparative information for payers and patients on performance levels and prices should be used to drive improvements in performance.

Option 4.5.2: Specific financial incentives *should be provided* for those aspects of care for which the payment system provides inadequate incentives or undesirable disincentives.

[Section II-B](#) discusses the areas where incentives may be needed. The detailed issues and options for how to implement specific financial incentive programs are discussed in [Section VII](#).

Issue 4.6: How should patients be encouraged to choose high-quality/low-cost providers?

Option 4.6.1: Patients should be *given complete discretion to choose providers*, using available information on quality and cost of providers as they wish.

Option 4.6.2: Payers should give patients *financial incentives* (e.g., lower copays or co-insurance amounts) for using providers with higher quality and/or lower cost.

Option 4.6.3: Payers should give patients *financial disincentives* (e.g., higher copays or co-insurance amounts) for using providers with lower quality and/or higher cost.

Option 4.6.4: Payers should *refuse to pay for care by the lowest quality and highest cost providers*.

Issue 4.7: How should patients be encouraged or assisted to adhere to preventive care processes that affect outcomes or costs?

- Option 4.7.1: *Payers* should provide financial incentives to *patients* (e.g., bonuses or reduced copays) for adherence with care processes required or recommended by their health care provider.
- Option 4.7.2: *Payers* should provide financial incentives to *providers* based on the level of patient involvement in care planning and/or patient adherence with care processes.
- Option 4.7.3: *Providers* should provide financial incentives to patients (e.g., bonuses or reduced copays) for adherence with care processes required or recommended by the provider.
- Option 4.7.4: Providers should establish *proactive systems for educating, monitoring, and encouraging patient adherence*, but *no explicit financial incentives* should be provided to patients.

2. Example of a Possible Payment System for Preventive Care

The following is just one example of how the options from the issues described above could be combined into a new method of payment for preventive care.

Method of Payment

- A single provider would be designated as the preventive care manager for an individual and be paid a periodic, prospectively defined preventive care management payment (CMP) to cover a full range of preventive care services for the patient, with the amount adjusted for the age/risk of the patient. In addition, the preventive care manager would be paid on a fee-for-service basis for actual preventive services provided beyond basic care management (e.g., immunizations). These payments would not be expected to cover either minor or major acute episodes, or prevention associated with management of a chronic condition, which would be covered under other payment systems.

Defining a Recommended Base Payment Amount

- A recommended amount for the preventive CMP and fees for prevention services would be established by a regional public/private collaborative (involving both payers and providers) based on the patient's age and risk factors.

- The recommended CMP amount and service fees would be based on the estimated cost of delivering the care management and prevention elements of the Clinical Practice Guideline (where one exists) for patients of that age and risk level.
- The CMP would include the estimated costs of services by all providers involved in the preventive care, along with a standard allocation of the payment to individual providers based on the proportion of the overall cost attributable to each provider.

Defining the Actual Base Payment Amount

- Providers or groups of providers would define and announce their actual CMP and service fees (i.e., their “price”) for a particular age/risk combination as a percentage of the suggested CMP and fees. Providers could charge different amounts to different payers, including individuals self-paying for care.
- Groups of providers could agree to share the CMP in any way they wished, either based on the standard allocation or a different allocation (e.g., based on cost savings achieved beyond the estimated costs of care). In the absence of such an agreement, the payer would pay each provider a standard allocation of the CMP times the provider’s percentage discount/premium.

Conditions for Receiving the Base Payment Amount

- Patients would be entered into a regional registry so that outcomes could be tracked for purposes of measuring performance.
- The CMP would be paid on a monthly basis to the provider serving as the patient’s preventive care manager in order to provide all preventive care. Service fees would be paid based on billings from the preventive care manager.
- Retroactive adjustments to payments would be made for cases where all mandatory care elements of the Clinical Practice Guideline for patients of that age and with those risk factors had not been provided, unless the provider certified that a particular element was contraindicated for the patient in question.
- Payment would not depend on which health care professional provided the care (as long as the professional was licensed to do so), or when or where the care was provided (e.g., in one office visit, multiple office visits, in the home, etc.).

Adjustments to the Base Payment Amount

- The CMP amount would be adjusted periodically in response to updates in Clinical Practice Guidelines, the discounts offered by providers, new technologies, inflation, etc.
- Providers would be permitted to revise their actual CMP rates upward at most yearly, but would be encouraged to revise them downward whenever possible.
- No adjustment in payment would be made for patients requiring significantly more services or costs than were assumed in computing the base payment level, but the outlier cases would be documented and used to adjust the age/risk categories and/or future base payment levels in the next year.

Performance Measurement and Incentives

- The preventive care manager would report publicly and receive a bonus payment based on the level of outcomes for patients paid for under the CMP and/or the level of provider compliance with non-mandatory processes under the Clinical Practice Guideline.
- The amount of the bonus would be based on a portion of the present value of avoided costs associated with the improved outcomes or process compliance. (For example, if the rate of acute episodes for patients declined, then the bonus payment would be based on a portion of the estimated cost of the avoided payments.)
- Groups of providers could agree to share the bonus payment in any way they wished.

Encouraging Patients to Promote Quality and Cost Containment

- Patients using the highest-quality, lowest-cost providers would have no copayments.
- Patients would also receive a financial reward based on adherence with both processes and outcomes (e.g., stopping smoking, getting immunizations, lowering cholesterol level) recommended by their preventive care manager.

VII. INCENTIVES FOR PERFORMANCE BEYOND BASIC PAYMENT STRUCTURES

[Section VI](#) dealt with issues associated with the first key question defined in the Introduction: *What changes should be made in current health care payment systems in order to eliminate (or significantly reduce) the current penalties and disincentives for higher-quality, lower-cost health care?*

This section deals with issues associated with the second key question: *What additional rewards or incentives, if any, should be included in health care payment systems in order to encourage higher quality, lower-cost health care?* Issues 1.11, 2.7, 3.7, and 4.5 in [Section VI](#) asked generally *whether* incentives should be provided, but not *how* they should be structured. This section addresses the following nine issues associated with the details of how incentives should be structured, assuming that some incentives are to be provided.

- 5.1 How should payments be changed based on provider compliance with non-mandatory processes?
- 5.2 How should payments be changed based on provider achievement of better patient outcomes?
- 5.3 How should payments be changed based on reduced utilization of services (or otherwise lower costs or slower growth in costs)?
- 5.4 How should payments be changed based on achievement of higher patient satisfaction levels?
- 5.5 Should payments be changed based on any other situations?
- 5.6 What threshold of performance should trigger payment changes?
- 5.7 How large should rewards or penalties be relative to base payment levels?
- 5.8 How should high-cost patients be protected against exclusion from care?
- 5.9 Should there be any adjustment in provider payment levels to reflect the costs of information technology needed to comply with requirements for reporting on processes, outcomes, patient satisfaction, or reduced utilization/cost?

This section is not divided into the different types of patients/conditions that were used in the preceding section. However, the decisions about each of the issues here will likely differ for each category of patient/condition and will depend on the specific payment system designed for that category.

Issue 5.1: How should payments be changed based on compliance with non-mandatory processes?

Issues 1.9, 2.6, 3.5, and 4.4 in [Section VI](#) asked whether any processes should be considered mandatory in order for a provider to receive payment. This issue asks whether and how payments should be changed based on compliance with processes that are not viewed as mandatory in order to receive the base payment.

Option 5.1.1: *Bonus payments* above the base payment level should be awarded to providers that demonstrate *higher compliance with non-mandatory care guidelines* in all diagnosis/severity categories where such guidelines exist.

Option 5.1.2: *Bonus payments* above the base payment level should be awarded to providers that demonstrate *higher compliance with non-mandatory care guidelines* only for diagnosis/severity categories *where outcomes cannot be measured effectively*.

Option 5.1.3: *Reductions* below the base payment level should be made for providers that demonstrate *poor compliance with non-mandatory care guidelines*.

Option 5.1.4: *Payment levels should not be changed* for higher or lower compliance with non-mandatory care guidelines, but *compliance rates should be publicized* for use by payers and patients in determining which provider to use. (Rewards or penalties could still be provided based on differences in patient outcomes, as discussed in Issue 5.2.)

See Issues 5.6 and 5.7 below regarding the threshold of performance for bonus payments and the amount of bonus payments.

Issue 5.2: How should payments be changed based on achievement of better patient outcomes?

Option 5.2.1: *Bonus payments* above the base payment level should be awarded to providers that achieve *better outcomes* for patients in a particular diagnosis/severity category.

Option 5.2.2: *Reductions* in payment below the base payment level should be made to providers that achieve *poorer outcomes* for patients in a particular diagnosis/severity category.

Option 5.2.3: *Payment levels should not be changed* for better or worse outcomes, but *outcomes should be publicized* to help payers and patients in determining which provider to use.

Issue 5.3: How should payments be changed based on reduced utilization of services (or otherwise lower costs or slower growth in costs)?

Option 5.3.1: *Bonus payments* above the base payment level should be awarded to providers or groups of providers that achieve *lower levels of utilization* for patients in a particular diagnosis/severity category.

Option 5.3.2: *Reductions in payment* below the base payment level should be made to providers or groups of providers that have *higher levels of utilization* for patients in a particular diagnosis/severity category.

Option 5.3.3: Bonuses or reductions in payment should be made based on differences in *outcomes that have a direct relationship to long-term and indirect costs* for the payer or patient, e.g., lengths of stay, readmission rates, etc.

See [Section II-E](#) for a discussion of different categories of costs.

Option 5.3.4: Bonuses in payment *should not be explicitly based on factors related to utilization or costs*; providers should reflect higher efficiency and lower costs through *lower prices or combined price packages (e.g., capitation-type arrangements)*, and payers should reward providers that offer lower prices by *encouraging or requiring patients to use these providers* rather than higher-cost providers.

Issue 5.4: How should payments be changed based on achievement of higher patient satisfaction levels?

Option 5.4.1: *Bonus payments above the base payment level* should be awarded to providers that demonstrate *higher levels of patient satisfaction* within a particular diagnosis/severity category.

Option 5.4.2: *Reductions below the base payment level* should be made for providers that demonstrate *lower levels of patient satisfaction* within a particular diagnosis/severity category.

Option 5.4.3: *Payment levels should not be changed* for higher or lower levels of patient satisfaction, but *patient satisfaction levels should be publicized* to help payers and patients in determining which provider to use.

Issue 5.5: Should payments be changed based on any other situations?

Option 5.5.1: Payers should provide financial incentives to providers to encourage them to discuss treatment options with patients and help patients choose the most cost-effective treatment options.

Issue 5.6: What threshold of performance should trigger payment changes?

These options would be applicable to any of the bonus/penalty systems established under Issues 5.1–5.5. NOTE: Options are described in terms of bonus payments, but similar options can be defined for payment reductions if the options involving penalties in Issues 5.1–5.5 are chosen.

Option 5.6.1: An *absolute threshold* of performance should be established at a *high level*, and bonus payments should only be awarded for performance above that level. The threshold could initially be based on current provider performance (e.g., the 80th or 90th percentile), but would not be reduced even if provider performance decreased. The threshold could be increased in the future, either based on demonstrated improvements in performance by providers or based on a desire by payers to encourage performance improvements.

Option 5.6.2: An *absolute threshold* of performance should be established at a *moderate level*, and bonus payments should only be awarded for performance above that level. The threshold could initially be based on current provider performance (e.g., the 50th percentile), but would not be reduced even if provider performance decreased. The threshold could be increased in the future, either based on demonstrated improvements in performance by providers or based on a desire by payers to encourage performance improvements.

Option 5.6.3: A *relative threshold* of performance should be established at a *high level* based on the current performance of providers (e.g., the 80th or 90th percentile of current provider performance), and bonus payments should only be awarded for performance above that level. The threshold would be adjusted periodically based on the actual performance of providers and could be increased or decreased if the performance level of the best providers increases or decreases.

Option 5.6.4: A *relative threshold* of performance should be established at a *moderate level* based on the current performance of providers (e.g., the 50th percentile of current provider performance), and bonus payments should only be awarded for performance above that level. The threshold would be adjusted periodically based on the actual performance of providers and could be increased or decreased if the performance level of the best providers increases or decreases.

A moderate threshold enables providers to receive rewards for smaller improvements in performance than does a high threshold. An absolute threshold gives providers a definitive target to aim for, whereas with a relative threshold, a provider may improve performance significantly, but fail to receive a bonus payment if other providers also improve by similar or greater amounts.

Option 5.6.5: The threshold of performance should be the provider's own prior performance, and bonus payments should be awarded for improvements in performance above the previous level.

Issue 5.7: How large should rewards or penalties be relative to base payment levels?

Option 5.7.1: The reward for higher performance in a category of diagnosis/severity should be a *relatively small percentage of the base payment level* for that category (e.g., less than 10%). Rewards should be *proportionately higher for higher levels of performance* above the minimum threshold.

Option 5.7.2: The reward for higher performance in a category of diagnosis/severity should be a *relatively large percentage of the base payment level* for that category (e.g., 10–50%). Rewards should be *proportionately higher for higher levels of performance* above the minimum threshold.

Option 5.7.3: The reward for higher performance in a category of diagnosis/severity should be a *relatively small percentage of the base payment level* for that category (e.g., less than 10%). Rewards should be *the same for all providers performing above the minimum threshold*.

Option 5.7.4: The reward for higher performance in a category of diagnosis/severity should be a *relatively large percentage of the base*

payment level for that category (e.g., 10–50%). Rewards should be the *same for all providers performing above the minimum threshold*.

Option 5.7.5: The reward for higher performance in a category of diagnosis/severity should be *based on a portion of the estimated reductions in total costs to payers* from the higher performance levels (e.g., if hospital readmission rates are lower, the reward would be a proportion of the estimated savings to the payer from fewer readmissions).

If rewards were proportional to reductions in costs to payers, they would also likely be proportional to reduced revenues to the provider, thereby offsetting some of the inherent financial disincentive that providers experience when they improve outcomes in ways that also reduce their revenues.

Issue 5.8: How should high-cost patients be protected against exclusion from care?

Option 5.8.1: Bonus payments above the base payment level should be awarded to providers that demonstrate significantly higher average levels of patient severity (upon admission) within a particular diagnosis/severity category.

Option 5.8.2: Reductions below the base payment level should be made for providers that demonstrate significantly lower average levels of patient severity (upon admission) within a particular diagnosis/severity category.

Option 5.8.3: No adjustments in payment should be made. Other mechanisms should be used to protect patients against inappropriate exclusion from care.

Issue 5.9: Should there be any adjustment in payment levels to reflect costs of information technology that providers need to comply with requirements for reporting on processes, outcomes, patient satisfaction, or reduced utilization/cost?

Option 5.9.1: *No adjustment in payment levels* should be made to reflect costs of information technology needed for compliance, particularly if providers receive higher payments for improved performance.

- Option 5.9.2: No adjustment in payment levels should be made to reflect costs of information technology needed for compliance, but *a loan program should be established* to enable small providers to finance the costs of technology acquisition.
- Option 5.9.3: *A cost-sharing arrangement should be established* between payers and providers to help cover the costs of information technology that enables compliance monitoring.

VIII. PATIENT CATEGORIES, CARE GUIDELINES, COSTS, MEASURES OF PERFORMANCE, AND TRANSPARENCY

To varying degrees, Sections [VI](#) and [VII](#) presume the existence of:

- Categories of diagnosis and patient severity (and age and risk) for which payment levels can be consistently established;
- Guidelines for care (often called Clinical Practice Guidelines) for each category of diagnosis and patient severity;
- Estimates of the cost to providers of following guidelines for care in an efficient manner;
- Performance measures for each category of diagnosis and patient severity; and
- Methods of collecting and reporting on performance measures.

In many regions of the country, systems are in place for one or more of these activities, but in others, they are not. In addition, concerns have been raised about whether the processes that are in place at the national level are moving quickly enough. This section discusses these issues and options for addressing them.

Issue 6.1: How should diagnosis/severity categories be established?

- Option 6.1.1: *A national public-private collaborative*, with representation from both payers and providers, should establish a comprehensive set of diagnosis/severity categories that should be used by all payers and by entities establishing care guidelines and performance measures.
- Option 6.1.2: *Regional or state public-private collaboratives*, with representation from both payers and providers, should establish diagnosis/severity categories that should be used by all payers in the affected region/state and by entities establishing care guidelines and performance measures. Efforts should be made to coordinate the development and use of payment/severity categories across states and regions.
- Option 6.1.3: *Each payer* should establish diagnosis/severity categories that it will use. Each payer should attempt to coordinate the development and use of payment/severity categories within the local region as well as with payers in other regions.

Issue 6.2: How should care guidelines be established for each diagnosis/severity category?

Option 6.2.1: *One or more national public–private collaboratives, with representation from payers, providers, and consumers, should establish care guidelines (distinguishing mandatory and non-mandatory processes) for each diagnosis/severity category, beginning with the categories affecting the largest numbers of patients and the largest amounts of health care expenditures. All payers should use these care guidelines as the basis for establishing payments and/or performance-based payment adjustments. An aggressive timetable should be established so that guidelines can be used for payment systems.*

Option 6.2.2: *Regional or state public–private collaboratives, with representation from payers, providers, and consumers, should establish care guidelines (distinguishing mandatory and non-mandatory processes) for each diagnosis/severity category where national guidelines have not been adopted. Efforts should be made to coordinate the development and use of care guidelines across states and regions to avoid duplication of effort. All payers in the affected region/state should use these care guidelines as the basis for establishing payments and performance-based payment adjustments. Where care guidelines are developed and utilized in different regions/states, evaluations should be conducted to assess the differences in outcomes resulting from use of different care guidelines.*

Issue 6.3: How should the costs of quality care be determined for each diagnosis/severity category?

Option 6.3.1: *One or more national, state, or regional public–private collaboratives, with representation from payers, providers, and consumers, should determine the *actual cost* of providing care consistent with care guidelines *as currently achieved by the most efficient providers/systems* for each diagnosis/severity category, beginning with the categories affecting the largest numbers of patients and the largest amounts of health care expenditures. Providers with good cost-accounting systems should contribute cost information on a confidential basis for analysis in determining these costs.*

Option 6.3.2: One or more national, state, or regional public–private collaboratives, with representation from payers, providers, and consumers, should estimate the *achievable cost* of providing care consistent with care guidelines for each diagnosis/severity category *using management and engineering analyses*, beginning with the categories affecting the largest numbers of patients and the largest amounts of health care expenditures. Providers with good cost-accounting systems should contribute cost information on a confidential basis for analysis in estimating these costs.

Option 6.3.1 estimates costs based on the best that providers have *actually achieved* to date, whereas Option 6.3.2 estimates costs based on what is *theoretically achievable*.

Issue 6.4: How should performance measures be established for each diagnosis/severity category?

Option 6.4.1: *One or more national public–private collaboratives*, with representation from payers, providers, and consumers, should establish performance measures for each diagnosis/severity category, beginning with the categories affecting the largest numbers of patients and the largest amounts of health care expenditures. All payers should use these performance measures as the basis for performance-based payment adjustments. An aggressive timetable should be established so that the performance measures can be used for payment systems.

Option 6.4.2: *Regional or state public–private collaboratives*, with representation from payers, providers, and consumers, should establish performance measures for each diagnosis/severity category where national measures have not been adopted. Efforts should be made to coordinate the development and use of performance measures across states and regions to avoid duplication of effort. All payers in the affected region/state should use these performance measures as the basis for performance-based payment adjustments.

Issue 6.5: How should care guidelines and performance measures be evaluated?

To the extent that process measures are used, extensive and rapid research is needed to determine the relationship between processes and outcomes.

Option 6.5.1: A well-funded national program of research should be established to continuously evaluate and update care guidelines and to determine the relationship between compliance with care processes and improved patient outcomes.

Option 6.5.2: Regional programs of research should be established to conduct studies of the relationship between compliance with care processes and improved patient outcomes.

Issue 6.6: Who should collect and report performance measures?

Option 6.6.1: *Providers (or groups of providers)* should be responsible for collecting and reporting on performance measures associated with the patients they care for, consistent with standards established at the national, state, or regional level.

Option 6.6.2: *Payers* should be responsible for collecting and reporting on the performance of providers caring for the patients covered by their payment plans, consistent with standards established at the national, state, or regional level.

Option 6.6.3: *Regional/state collaboratives* should be responsible for collecting and reporting on the performance of providers supplying care in their geographic area, consistent with standards established at the national level.

Issue 6.7: Should performance levels of providers on process, outcome, patient satisfaction, and/or efficiency be publicly available?

Option 6.7.1: Public disclosure of performance levels should be at the *discretion of the individual provider*.

Option 6.7.2: *A regional or state health information organization* should collect and publicly report a subset of performance measures in a way that is meaningful to citizens.

Option 6.7.3: *Payers* should make all performance measures used for bonus or penalty payments publicly available.

To the extent that information about both quality and price (see Issue 6.8) is made publicly available, it would also be possible to develop and report on measures of value (i.e., the ratio of quality to price).

Issue 6.8: Should providers' payment levels (prices) for diagnosis/severity categories be publicly available?

Option 6.8.1: Public disclosure of prices for diagnosis/severity categories should be at the *discretion of the provider or the payer*.

Option 6.8.2: *Providers* should publish *the prices they will charge self-pay patients* for each diagnosis/severity category.

Option 6.8.3: *Providers* should publish *the range of prices they charge all payers* for each diagnosis/severity category.

Option 6.8.4: *Payers* should publish *the prices they pay providers* for each diagnosis/severity category.

Option 6.8.5: A *regional or state public/private collaborative* should publish *the prices that payers pay providers* for each diagnosis/severity category.

To the extent that information about both price and quality (see Issue 6.7) is made publicly available, it would also be possible to develop and report on measures of value (i.e., the ratio of quality to price).

Publishing prices for multiple providers can raise anti-trust concerns, so this will need to be done in consultation with the U.S. attorney general and state attorney(s) general. Legislation may be needed to provide a safe harbor for such an approach if appropriate benefits can be demonstrated.

IX. IMPLEMENTATION OF CHANGES IN PAYMENT SYSTEMS

This section addresses issues associated with implementation of whatever payment system is developed based on the issues discussed in Sections [VI](#), [VII](#), and [VIII](#).

In addition to reaching consensus on the desired structure of payment systems, it is critical to define a feasible path for actually implementing the changes needed to achieve those structures.

Issue 7.1: How should payment changes be phased in?

Option 7.1.1: Demonstrations of alternative payment systems for particular diagnosis/severity categories should be developed and tested in individual regions of the country. All payers in a region with a demonstration project should pay for patients in the specific diagnosis/severity category using the same basic payment structure, in order to insure that the same incentives exist for all patients in that category and for all providers, and to insure that there are no competitive advantages or disadvantages created for different payers. (This would require waivers or demonstration projects for national payers such as Medicare.) The U.S. Department of Justice should work proactively to provide guidance to payers to avoid anti-trust concerns, and/or recommend legislative modifications to Congress if necessary, in order to enable effective alignment of payment systems. When a region’s payment demonstration project proves to be successful, other regions should adopt it and, ideally, all payers in all regions.

Option 7.1.2: National payers (e.g., Medicare, national private insurance plans, etc.) should develop and implement new payment systems and then encourage regional payers to adopt them.

Issue 7.2: Should payment changes be required to be “budget neutral”?

“Budget neutral” means that the cost to a payer is no greater or less under the new payment system than it would have been under the previous payment system. Budget neutrality is generally viewed as being measured over a one-year timeframe—the typical length of a government budget year or health insurance contract. As noted in [Section II-E](#), a short timeframe can cause distortions in incentives,

because some short-run cost savings can lead to longer-run cost increases, and vice versa.

- Option 7.2.1: Initial demonstrations of alternative payment systems should focus on diagnosis/severity categories where reductions in average expenditures for care seem possible based on the current distribution of costs across providers (i.e., categories where some providers have demonstrated lower costs with equal or better outcomes than others).
- Option 7.2.2: Initial demonstrations of alternative payment systems should focus on combinations of diagnosis/severity categories where possible reductions in average expenditures in one category will offset possible increases in short-run average expenditures in another (e.g., for categories where there are significant differences in quality but higher short-run costs for higher quality). Payers (particularly employers, rather than health plans) will also need to explicitly recognize the value of reductions in indirect costs and long-run costs, since some increases in short-run direct costs may be necessary to reduce indirect costs or long-term costs. (See [Section II-E](#).)
- Issue 7.3: How should the effects of payment changes be evaluated?**
- Option 7.3.1: A well-funded national program of research should be established to evaluate the effects of new payment systems and identify areas where problems exist or where there are opportunities to further improve value. In addition, a standard set of definitions and measures for evaluations should be established to insure comparability of results across evaluations.
- Option 7.3.2: Regional programs of research should be established to evaluate the effects of new payment systems and identify areas where problems exist or where there are opportunities to further improve value. A network of researchers should be created in order to establish a standard set of definitions and measures for evaluations in order to promote comparability of results across evaluations.

X. CONCLUSION

Unfortunately, there are no easy answers regarding which options are best for most of the issues identified in Sections [VI](#), [VII](#), [VIII](#), and [IX](#). In some cases, one option may seem preferable, but concerns exist about potential unintended consequences. In other cases, there is simply insufficient knowledge or experience as to how providers or patients will respond to enable a preferred option to be identified. This uncertainty is due to the fact that there have been relatively few cases where significantly different payment systems have been attempted, and even fewer where thorough evaluations have been conducted.

One clear conclusion that can be drawn, therefore, is that payment demonstration projects must be developed, implemented, and evaluated in order to make progress on payment reform. There is growing consensus that the serious problems of quality and cost affecting the health care system cannot be fixed without fundamental changes in the way the nation pays for health care, and so projects to test and demonstrate alternative payment systems must be a high priority.

A second conclusion is that a wide variety of payment demonstrations are needed. Not only are there many different issues, and multiple options for resolving each of those issues, but every region of the country is also different in terms of the number, types, and relationships of health care purchasers, payers, and providers. Just as experimentation and evaluation is a hallmark of evidence-based medicine, experimentation and evaluation will also likely be needed in order to develop the most effective cure for the ills of the payment system.

This leads to a third conclusion that may surprise many: The leadership for payment reform demonstrations should come from the regional level, rather than the national level. Health care is a fundamentally regional enterprise, since most providers and even most payers operate exclusively or primarily in metropolitan regions, states, or multi-state areas. Just as there will likely not be any single method of payment that will work for all types of patients and conditions, there may also not be a single type of payment system that will work in all parts of the country.

While payment demonstrations can and should be pursued at the regional level, this does not mean that payment reform should be a parochial enterprise. Indeed, just as medicine itself advances the state of the art through local innovations that are supported, replicated, and evaluated nationally, so too can payment reform be more successful if there is national support for the development, evaluation, and replication of regional payment demonstrations. Both the federal government and private foundations can play a major role in helping to support this.

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