A path to bundled payment around a hospitalization
4A The Congress should require the Secretary to confidentially report readmission rates and resource use around hospitalization episodes to hospitals and physicians. Beginning in the third year, providers’ relative resource use should be publicly disclosed.

COMMISSIONER VOTES: YES 17 • NO 0 • NOT VOTING 0 • ABSENT 0

4B To encourage providers to collaborate and better coordinate care, the Congress should direct the Secretary to reduce payments to hospitals with relatively high readmission rates for select conditions and also allow shared accountability between physicians and hospitals. The Congress should also direct the Secretary to report within two years on the feasibility of broader approaches, such as virtual bundling, for encouraging efficiency around hospitalization episodes.

COMMISSIONER VOTES: YES 16 • NO 0 • NOT VOTING 0 • ABSENT 1

4C The Congress should require the Secretary to create a voluntary pilot program to test the feasibility of actual bundled payment for services around hospitalization episodes for select conditions. The pilot must have clear and explicit thresholds for determining whether it can be expanded into the full Medicare program or should be discontinued.

COMMISSIONER VOTES: YES 16 • NO 0 • NOT VOTING 0 • ABSENT 1
Chapter summary

The fee-for-service payment system fails to encourage providers to cooperate with one another to improve coordination of beneficiaries’ care and appropriately control the volume and cost of services delivered across an episode of care. This chapter explores changes in fee-for-service payment for care provided around a hospitalization to address these failures. It finds that bundling Medicare payment to cover all services associated with an episode of care has the potential to improve incentives for providers to deliver the right mix of services at the right time. The benefits of such a change in Medicare payment would likely not accrue to Medicare and its beneficiaries alone; given that Medicare is the single largest purchaser of health care, its payment reforms often influence other purchasers and insurers and spill over to other patients.

Under bundled payment, Medicare would pay a single provider entity (composed of a hospital and its affiliated physicians) an amount intended to cover the costs of providing the full range of care needed over a hospitalization episode. Although this approach holds great potential, the Commission recognizes the complexity associated with...
bundling payment. Accordingly, the Commission offers an incremental approach, composed of three related policies.

First, the Commission recommends that the Secretary confidentially disclose to hospitals and physicians information about their service use around hospitalization episodes. This information would allow a given hospital and the physicians who practice in it to compare their risk-adjusted performance relative to other hospitals and physicians. In turn, they may consider ways to adjust their practice styles and coordinate care to reduce their service use. After two years of confidential disclosure to providers, the same information should be publicly available.

**Recommendation 4A**

*The Congress should require the Secretary to confidentially report readmission rates and resource use around hospitalization episodes to hospitals and physicians. Beginning in the third year, providers’ relative resource use should be publicly disclosed.*

Because information disclosure alone is likely not sufficient to fully motivate and sustain change, the Commission also recommends changing payment to hold providers financially accountable for service use around a hospitalization episode. Specifically, it recommends that Medicare reduce payment to hospitals with relatively high risk-adjusted readmission rates for select conditions. The Commission recommends that this payment change be made in tandem with a previously recommended change in law to allow hospitals and physicians to share in the savings that result from reengineering inefficient care processes during the episode of care.

**Recommendation 4B**

*To encourage providers to collaborate and better coordinate care, the Congress should direct the Secretary to reduce payments to hospitals with relatively high readmission rates for select conditions and also allow shared accountability between physicians and hospitals. The Congress should also direct the Secretary to report within two years on the feasibility of broader approaches, such as virtual bundling, for encouraging efficiency around hospitalization episodes.*
Recognizing that readmissions account for only part of the variation in practice patterns around an admission, the Commission also recommends that the Secretary explore broader payment changes to encourage efficiency around hospitalization episodes for providers not accepting a bundled payment. Medicare should conduct a voluntary pilot program to test bundled payment for an episode of care extending past discharge for select conditions. Bundled payment raises a wide set of implementation issues. It requires that Medicare create a new payment rate for a bundle of services and that providers organize to deliver care efficiently and determine how they will share the payment. A pilot program allows CMS to identify and resolve the attendant design and implementation issues and gives providers who are ready the chance to start receiving the bundled payment. If the pilot succeeds in improving coordination of care and reducing costs, bundled payment for hospitalization episodes of care should become the dominant Medicare payment method for these services.

The Congress should require the Secretary to create a voluntary pilot program to test the feasibility of actual bundled payment for services around hospitalization episodes for select conditions. The pilot must have clear and explicit thresholds for determining whether it can be expanded into the full Medicare program or should be discontinued.

The Commission is under no illusion that the path of policy change outlined here will be easy. Implementation will undoubtedly require more administrative resources for CMS. And, despite our best efforts to anticipate them, unforeseen consequences are likely to be encountered and policies will need to be adjusted. Nevertheless, the Commission believes the status quo is unacceptable. The current payment system is fueling many of the troublesome aspects of our health care system: Beneficiaries’ care is often uncoordinated and health care costs are increasing to an extent that strains many beneficiaries’ ability to pay their health care bills, the nation’s ability to finance Medicare, and the ability of a large segment of the non-Medicare population to afford health insurance.
The fee-for-service (FFS) payment system fails to encourage providers to cooperate with one another to improve coordination of beneficiaries’ care and appropriately control the volume and cost of services delivered across an episode of care. This chapter explores changes in FFS payment for care provided around a hospitalization to address these failures. The Commission finds that bundling Medicare payment to cover all services associated with an episode of care has the potential to improve incentives for providers to deliver the right mix of services at the right time.

Under bundled payment, Medicare would pay a single provider entity (composed of a hospital and its affiliated physicians) an amount intended to cover the costs of providing the full range of care needed over a hospitalization episode. Providers would not only be motivated to contain their own costs but also would have a financial incentive to partner with efficient providers or collaborate with current partners to improve their collective performance. Providers involved in an episode could develop ways to allocate payments among themselves. This flexibility should give providers a greater incentive to work together and be mindful of the impact their service use has on the overall quality of care, the volume of services provided, and the cost of providing each service.

With such significant change in incentives for an industry as complex as health care comes the possibility of unintended consequences and design challenges. The lack of “systemness” in health care suggests that hospitals and physicians may find it difficult to agree on how to effectively manage care and share the bundled payment (Berenson et al. 2006, Budetti et al. 2002). This chapter recommends incremental steps toward bundling payment over episodes of care around a hospitalization.

A first step is for Medicare to confidentially inform hospitals and physicians about their patterns of resource use around certain hospitalization episodes, including readmission rates. After two years, the information should also be disclosed to the public. If information is made public, providers may take it more seriously and beneficiaries may use it to inform their health care decisions.

Program-wide payment changes are also needed. The Commission recommends that payments be reduced for hospitals with high readmission rates for select high-volume, high-cost conditions. This change should encourage hospitals to dedicate resources to processes that can reduce readmission rates. Because the Commission recognizes that hospitals will need physician cooperation to reduce avoidable readmissions, it recommends that the Congress revise existing restrictions to allow hospitals to financially reward physicians for their focus in addressing this problem.

Concurrent with information dissemination and a change in readmissions payment policy, CMS should conduct a pilot program to test bundled payment. Bundling payment raises a range of implementation issues because under bundled payment the entity accepting the payment—rather than Medicare—has discretion in the amount it pays providers for care provided, whether to pay for services not now covered by Medicare, and how it rewards providers for reducing costs and improving quality. The advantage of this flexibility is that providers can decide the best way to structure service delivery and payment to achieve efficient, quality care. But these changes could also lead to some unintended consequences. A pilot program will allow CMS to consider policies to reduce the likelihood of unintended consequences and determine how Medicare can best share in the savings. It also gives entities that are ready the chance to start receiving the bundled payment. If the pilot succeeds in improving coordination of care and reducing costs, bundled payment for episodes of care should become the Medicare FFS payment method for these services.

This chapter first explores the problems with current FFS payment, how bundling payment across providers around a hospitalization episode can change their behavior and why focusing our attention on the window of time around an admission is so important. The second part of the chapter outlines the specific incremental steps the Commission believes will help realign financial incentives so that they reward providers for delivering the appropriate volume of services, coordinating beneficiaries’ care, and improving efficiency across an episode of care.

The rationale for bundling payment

Ideally, payment systems should financially motivate hospitals and physicians to collaborate in identifying and implementing opportunities to limit the use of low-value services, coordinate beneficiaries’ care, and work together to improve efficiency, particularly across an episode of
A path to bundled payment around a hospitalization

care. Bundling payment across an episode of care may be the best way to achieve these objectives in the context of a FFS system.

**FFS rewards more care rather than the right mix**

In FFS, Medicare generally pays a prospective amount for services delivered by each provider based on the expected costs of providing that service. For most providers, the unit of service is relatively narrow and encompasses only the services a provider furnishes. For example, most physicians are paid per visit, skilled nursing facilities are paid per day, and hospitals’ outpatient departments and ambulatory surgical centers are paid per procedure and per test.

In some instances, Medicare bundles payment across services provided by a single provider type. For example, under the inpatient prospective payment system, hospitals are paid a single amount based on the patient’s diagnosis to cover all hospital costs associated with the stay. (Physician services provided to beneficiaries during the stay are billed and paid separately under the physician fee schedule, even if the physician is employed by the hospital.) Surgeons are also paid a bundled fee called the global surgical fee. It covers the cost of all the surgeon’s services around the surgery. The intent of these approaches is to break the link between payment and volume of services and, in so doing, induce greater efficiency. While these payment innovations may have improved providers’ efficiency (e.g., shorter length of stay) during the episode of care, they pertain only to a single provider (e.g., the hospital) and therefore have a limited effect in reducing the aggregate volume of services paid for by Medicare.

FFS payment rewards volume because it pays for each service separately without regard to the mix or volume of services used in caring for patients. For example, Medicare pays hospitals the same for readmissions (some of which could be avoided) as for initial admissions. Similarly, Medicare pays most physicians for each service, without attention to the appropriateness of the mix of physician services. Because Medicare’s payments do not promote coordination of and quality of care, more admissions (including readmissions) increase income for hospitals and more visits, procedures, and tests provide more income for most physicians.

Another confounding dynamic in FFS payment policy is that it often pays more generously for high-tech services than for low-tech services. Providers are, in turn, more inclined to deliver these high-tech, high-margin services, even if lower cost alternatives could achieve the same or better outcomes for patients. An account of the efforts of Seattle’s Virginia Mason Medical Center (VMMC) to change its mix of services for certain conditions illustrates the financial trade-offs associated with providing more efficient care under FFS. In treating cardiac arrhythmias, VMMC realized that physicians often ordered more expensive stress tests using nuclear imaging scans instead of less expensive, less profitable, but equally effective, stress echocardiograms. By encouraging providers to use the less costly service, VMMC could reduce costs for a commercial insurer from $2,300 to $695 per episode, but this action would decrease its margin from $785 to $305. Similarly, because VMMC found that emergency department visits for insured patients are profitable (a margin of $180), it had little incentive to invest in reducing the number of them (Ginsburg et al. 2007). Hospitals for which readmissions are profitable have no financial motive to avert them (as discussed later).

In addition, legal restrictions often prevent hospitals from financially rewarding physicians for reducing hospital costs associated with Medicare patients. Physicians clearly affect hospitals’ costs in their treatment decisions (e.g., use of the intensive care unit (ICU)), the volume and mix of supplies they use (e.g., type of implantable device), and their decisions about when to discharge a patient. If they have some ability to share in the savings they can produce for hospitals, physicians might be more cost conscious.

The potential for improved efficiency is evidenced by the finding that areas with lower costs have comparatively good quality care. In fact, areas with higher Medicare spending tend to score substantially worse on a composite indicator of quality of care provided to Medicare beneficiaries (CBO 2008). A study on state-level spending variation found that, if spending per Medicare beneficiary increased by $1,000 in a state, there was an associated decrease in most measures of good medical practices, such as the share of heart attack patients who were given aspirin (Baiker and Chandra 2004). This research does not mean that any reduction in spending improves quality, however. The specific mix of services and the quality of those services matter.

The experience of industry leaders suggests a roadmap for improvement during hospitalization episodes. Motivated hospitals have found that—by working with physicians to revamp and standardize the care process—mortality
rates, complication rates, readmission rates, and costs have declined. For example:

- By having physicians and nurses complete a checklist of safety measures (e.g., whether the bed is propped up at the right angle, and whether ventilated patients are given antacids) during patients’ ICU stays, Michigan hospitals reduced their infection rates by 66 percent within the first three months of the project. These declines have been sustained, saving about $75 million and 1,500 lives after 18 months of the initiative (Gawande 2007).
- Catholic Healthcare Partners created a program to improve care for its heart failure patients by promoting the consistent use of evidence-based guidelines. Aggregate all-cause heart failure readmissions within 30 days decreased from 22 percent in 2002 to consistently below 20 percent between 2004 and 2006. Performance on a composite of four Hospital Compare heart failure measures improved from 72 percent in 2003 to 95 percent in 2006. In addition, inpatient mortality for all patients with heart failure admitted over the same period declined 40 percent (Hostetter 2008).
- Intermountain Health System found that if, when discharging cardiovascular patients, physicians and nurses referred to a checklist of indications and contraindications for five medications known to prevent complications and save lives, appropriate use of the medications increased dramatically (Lappe et al. 2004).

Financial incentives in FFS are needed to motivate more providers to emulate these successes and increase efficiency.

**Bundling payment around a hospitalization can change incentives**

Paying a bundled fee for care provided during a hospitalization and immediately afterward means that instead of Medicare making a separate diagnosis related group (DRG) payment to the hospital and separate payment to the physician, skilled nursing facility, and outpatient department, Medicare would make one payment to a provider entity, which would allocate the funds among the providers delivering care during the covered episode. A bundled payment would create the possibility for the provider entity (likely organized around hospitals and physicians) to reward both desirable and undesirable behavior. However, the Commission believes that, through careful policy design, the risk for undesirable behavior can be minimized. CMS has had some experience addressing these types of issues in the course of demonstration programs and in aspects of the current FFS and Medicare Advantage programs.

**Desirable responses**

Providers would have the incentive to reduce unnecessary physician services during the hospitalization. Research suggests that there is an opportunity to reduce the number of inpatient physician visits without affecting the quality of care. Dartmouth researchers found that inpatient visits and inpatient specialist consultations were more than two times higher in the highest spending regions than in the lowest spending regions, with no discernible difference in the quality of care that patients received (Fisher et al. 2003a, Fisher et al. 2003b).

Second, hospitals could compensate physicians for using fewer resources during an inpatient stay. Accordingly, the hospitals’ costs could be reduced, whether through shorter lengths of stay, less waiting time between surgeries in the operating room, less use of the ICU, or more judicious use of hospital supplies. For example, some cardiologists at the PinnacleHealth System hospital group in Pennsylvania who previously inflated an artery-opening balloon each time they inserted a stent into a patient’s clogged arteries, agreed to try to use a single balloon throughout a procedure. That step, which the doctors say poses no additional risk to patients, saves at least a couple of hundred dollars per procedure (Abelson 2005).

In a third desired response—given a bundled payment covering a hospitalization and care provided for a specified time after discharge (e.g., 30 days)—providers would be encouraged to evaluate ways to reduce postdischarge costs such as readmissions and unnecessary post-acute care. Physicians have referred to time after discharge as “white space,” reflecting the fact that providers are inconsistent in their attention to what happens to the patient at that point. Under this policy, for example, they should be motivated to increase the likelihood that patients recently discharged from the hospital have an office visit with their physician to avoid readmission. Providers should also evaluate the need for post-acute care and the best source for it.

Savings from preventing readmissions can be considerable. About 18 percent of Medicare hospital admissions result in readmissions within 30 days of discharge, accounting for $15 billion in spending. The Commission found that Medicare spends about $12 billion on potentially preventable readmissions, as defined by
A path to bundled payment around a hospitalization

Obviously, the definition of potentially preventable involves some degree of clinical judgment and some of these cases may not be preventable.

The few studies that have been done of bundled payments suggest these desirable responses are attainable. One private sector pilot project looked at the impact of creating a medical episode-of-care payment for either knee or shoulder arthroscopic surgery that included a two-year warranty from the surgeon. As a result, total episodic costs were lower, the surgeon’s and the hospital’s margins had improved, and the number of “redos” and complications had decreased (Johnson and Becker 1994).

The Medicare Participating Heart Bypass Center demonstration of the 1990s found that bundled payment could increase providers’ efficiency and reduce Medicare’s costs. Most of the participating sites found that, under a bundled payment, hospitals and physicians reduced laboratory, pharmacy, and ICU spending. Spending on consulting physicians also decreased, as did spending for postdischarge care. Quality remained high (Cromwell et al. 1998). (See text box for a more detailed discussion.)

More recently, in 2006, the Geisinger Health System created a program that pays for coronary artery bypass graft surgery with a bundled payment covering all care for 30 days before and 90 days after an intervention, including related complications, readmissions, and follow-up care. The provider-driven pay-for-performance process that accompanied the change in payment method has been found to result in an increase in provider compliance with best practices and to positively influence 30-day clinical outcomes. Both length of stay and 30-day readmission rates declined. Incentive payments were available for physicians who adhered to best practices, but physicians were not at financial risk for the cost of complications in the 90-day postoperative window (Casale et al. 2007).

Undesirable responses

Providers could react to the incentives of a bundled payment in less desirable ways. In deciding how to share the bundled payment, the provider entity could choose to reward physicians who initiate more admissions, particularly those that are relatively generously reimbursed. This reaction would reinforce a culture that values volume growth. For example, providers may find that increasing the number of admissions creates a win-win situation for both hospitals and physicians under bundled payment. A higher volume could reduce the unit cost of each service by spreading fixed costs over a higher number of inpatient stays, thereby improving the margin on the bundle. This higher margin would leave a bigger pie for hospitals and physicians to share. Accordingly, physicians may be more inclined to admit a patient who could be treated on either an inpatient or an outpatient basis.

A second concern is that, because there are disparities in the financial performance among hospitals, some hospitals will be more able to pay physicians higher rates than others. So, as they compete to attract physicians, some hospitals could be forced to redirect money needed for patient care (e.g., nursing) to physicians in order to offer attractive compensation arrangements.

Third, aligning economic incentives allows for the possibility that providers would seek to profit by furnishing inappropriately low levels of service (or “stinting”), which would compromise the quality of patient care. Similarly, providers could respond by “unbundling”—for example, by delaying some physician visits (e.g., a psychiatric consult) beyond the period that the bundled payment covered (e.g., the hospital stay). This type of stinting would increase Medicare spending, as Medicare would in essence pay twice for a service—once in its bundled payment amount and again when it is delivered outside the bundled period.

Fourth, to the extent that risk adjustment is imperfect and physicians find that payments for certain patients (e.g., frail, senile, nonadherent patients) are inadequate, physicians may avoid these patients. Also, physicians who care for these “low-margin” beneficiaries could find that hospitals are reluctant to grant them admitting privileges. This potential problem could be tempered by an outlier policy similar to the one in place for hospitals. Under this approach, providers would not be fully responsible for the costs of exceptionally high-cost patients.

A fifth possible response could be a change in how hospitals code patients’ severity level for inpatient care. Currently, hospitals rely on physicians’ notes on diagnoses in the medical record to determine how to code the severity of an admission. Because physicians’ payment does not depend on their coding, they have no incentive to overstate the severity. Similarly, they have no incentive to be thorough, particularly in recording comorbidities, which can enable hospitals to bill for the level of payment that reflects the true severity of the patient. Under a bundled payment, however, physicians would have the
incentive to cooperate with hospitals on coding. To the extent this cooperation results in more accurate coding, rather than overstatements of severity, it may be desirable. However, it can increase Medicare spending. To offset this potential increase, CMS can make adjustments, just as it did when it anticipated coding behavior changes coinciding with DRG changes.

**Why focus payment changes around a hospitalization episode?**

There are several reasons to focus on changing payment incentives on hospitalization and postdischarge care. First, patients who have been hospitalized are more likely to receive care in different settings with different physicians managing their care. This is particularly the case today, given the increasing prevalence of hospitalists, who care for patients only in an inpatient setting, leaving patients to obtain care from other physicians at discharge. Under these circumstances, joint accountability is particularly important.

Second, changing incentives around a hospitalization episode presents an opportunity to improve care delivery and reduce fragmentation at a time when patients are at greatest risk. Discharge from the hospital, in particular, is a critical and vulnerable care juncture for Medicare beneficiaries. Patients often experience the transition to home or post-acute care settings abruptly. Discharges may occur on weekends and involve clinicians who may not have an ongoing relationship with the patient, who may suddenly be expected to assume a self-management role in recovery with little support and preparation (Coleman and Berenson 2004). Patients and families may not realize how vulnerable patients are, particularly if the patient has not returned to his or her baseline physical or cognitive functional state in the interval between discharge and follow-up. Further, patients may not know which
provider to call with questions during that interval, as it is not always clear which provider is responsible for and informed about the patient’s care (HMO Workgroup 2004).

Discharge is also a time when patients are more likely to be receptive to health care recommendations. The chances of long-term adherence to medication regimens are significantly higher when medications are provided at hospital discharge, and this difference is associated with decreased mortality rates (Lappe et al. 2004). Interventions at discharge may also be effective given the hospital-based resources and availability of the patient for consultation. Experts have noted that hospital-based interventions, such as improving discharge medications, could be more easily implemented, more effectively managed and measured, and more cost effective than other outpatient intervention strategies (Lappe et al. 2004).

Third, these beneficiaries tend to be among the most costly for Medicare. The most costly beneficiaries (i.e., in the top 20 percent) have an average of 1.7 admissions per year (CBO 2005). In the search for ways to target care coordination to those most in need, focusing providers’ attention on these beneficiaries may be a highly cost-effective way to improve care coordination.

Fourth, focusing on the postdischarge period creates the opportunity to address some of the wide variation in spending across geographic areas and providers. For example, Medicare 30-day readmission rates range from 14 percent in the lowest decile of states to 22 percent in the highest decile (Commonwealth Fund 2006). The Commission’s analysis also finds wide variation in service use during the postdischarge period (Table 4-1). For example, for patients with chronic obstructive pulmonary disease (COPD), hospitals with the most costly episodes for COPD patients spend about 65 percent more on readmissions than hospitals with average spending. These high-spending hospitals also pay about 78 percent more for post-acute care than hospitals with average spending. Because this analysis looks at Medicare spending only, it does not reflect differences in providers’ costs or the potential for savings if variation in hospitals’ costs were reduced. The Commission believes savings can be gained from inefficient hospitals reducing their costs; under a bundled payment approach, Medicare should share in those savings.

Fifth, focusing on care around a hospitalization engages the two most influential provider types (hospitals and physicians) in finding more efficient ways to deliver care, thereby fostering “systemness.” Collectively engaging hospitals and physicians, rather than focusing on physicians and their “power of the pen” alone, has value. Hospitals have the managerial resources to restructure care, can play the role of convener to facilitate buy-in to best practices, and are geographically dispersed. Given these capabilities and their role in the marketplace, hospitals are positioned to promote change if incentives also apply to them.

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**An incremental approach to bundled payment**

While the rationale for bundling payment is compelling, the previous section points to some of the thorny implementation issues. Because these issues are not easily resolved, the Commission concludes that an incremental approach is necessary to improve incentives without inviting large-scale unintended consequences. It should have three components: information disclosure, a change in payment for readmissions coupled with shared accountability, and a pilot program to test bundled payment.

These changes should apply to select conditions, at least initially, and should be pursued in conjunction with a separate pay-for-performance quality program, as the Commission has recommended in the past (MedPAC 2005a). Starting with select conditions is important, because providers can focus their efforts, increasing the likelihood that they will achieve early success. The lessons learned in caring for the selected conditions can then be applied to payment changes for other conditions. Conditions such as congestive heart failure and COPD appear to hold particular promise, given the success of pioneering providers in reducing costs (Naylor et al. 1999).

Implementing this incremental approach would require CMS to undertake a variety of new functions (e.g., measure and report resource use, adjust hospital payment for readmission rates, conduct a pilot program that may involve establishing facility-specific payment rates) and resolve a wide range of implementation issues (e.g., risk adjustment, outlier policies, selecting the conditions to be subject to the payment changes). Given the complexity and breadth of these demands on CMS, the Congress may wish to consider making a special appropriation to CMS,
much as it did when it passed the Medicare Prescription Drug, Improvement, and Modernization Act of 2003.

**Reporting resource use to providers**

CMS should first confidentially report provider resource use around select hospitalization episodes to hospitals and physicians. This feedback should be detailed so that providers can understand how their practice patterns differ from those of their peers and assess the opportunity for change. After two years the annual feedback should be available to the public.

Using resource use measurement results for provider education would give CMS experience using the measurement tool and allow the agency to explore the need for refinements. Providers could review the results and make changes to their practice as they deem appropriate and also help shape the measurement tool.

Providing feedback on resource use patterns to physicians alone has been shown to have a statistically significant, but small, downward effect on resource use (Balas et al. 1996, Schoenbaum and Murray 1992). Medicare’s feedback on resource use could be more effective in reducing use than

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**Table 4–1**: Average risk-adjusted spending for selected conditions during and 30 days after a hospital stay

<table>
<thead>
<tr>
<th>Type of condition and service</th>
<th>Low-resource-use hospitals</th>
<th>Average</th>
<th>High-resource-use hospitals</th>
<th>Percent</th>
<th>Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COPD</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total episode</td>
<td>$6,372</td>
<td>$7,871</td>
<td>$9,748</td>
<td>23.8%</td>
<td>$1,877</td>
</tr>
<tr>
<td>Hospital</td>
<td>4,408</td>
<td>4,414</td>
<td>4,406</td>
<td>-0.2%</td>
<td>-8</td>
</tr>
<tr>
<td>Physician</td>
<td>547</td>
<td>569</td>
<td>576</td>
<td>1.2%</td>
<td>7</td>
</tr>
<tr>
<td>Readmission</td>
<td>671</td>
<td>1,543</td>
<td>2,550</td>
<td>65.3%</td>
<td>1,007</td>
</tr>
<tr>
<td>Post-acute care</td>
<td>466</td>
<td>998</td>
<td>1,780</td>
<td>78.3%</td>
<td>782</td>
</tr>
<tr>
<td>Other</td>
<td>280</td>
<td>347</td>
<td>436</td>
<td>25.6%</td>
<td>89</td>
</tr>
<tr>
<td><strong>CHF</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total episode</td>
<td>$7,757</td>
<td>$9,278</td>
<td>$11,019</td>
<td>18.8%</td>
<td>$1,741</td>
</tr>
<tr>
<td>Hospital</td>
<td>4,837</td>
<td>4,826</td>
<td>4,824</td>
<td>0.0%</td>
<td>-2</td>
</tr>
<tr>
<td>Physician</td>
<td>612</td>
<td>647</td>
<td>650</td>
<td>0.5%</td>
<td>3</td>
</tr>
<tr>
<td>Readmission</td>
<td>1,102</td>
<td>1,986</td>
<td>2,965</td>
<td>49.3%</td>
<td>979</td>
</tr>
<tr>
<td>Post-acute care</td>
<td>842</td>
<td>1,378</td>
<td>2,041</td>
<td>48.1%</td>
<td>663</td>
</tr>
<tr>
<td>Other</td>
<td>363</td>
<td>441</td>
<td>539</td>
<td>22.1%</td>
<td>98</td>
</tr>
<tr>
<td><strong>CABG with cardiac catheterization</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total episode</td>
<td>$31,534</td>
<td>$33,421</td>
<td>$35,656</td>
<td>6.7%</td>
<td>$2,235</td>
</tr>
<tr>
<td>Hospital</td>
<td>25,591</td>
<td>25,474</td>
<td>25,390</td>
<td>-0.3%</td>
<td>-84</td>
</tr>
<tr>
<td>Physician</td>
<td>3,390</td>
<td>3,452</td>
<td>3,404</td>
<td>-1.4%</td>
<td>-48</td>
</tr>
<tr>
<td>Readmission</td>
<td>947</td>
<td>1,887</td>
<td>2,911</td>
<td>54.3%</td>
<td>1,024</td>
</tr>
<tr>
<td>Post-acute care</td>
<td>800</td>
<td>1,651</td>
<td>2,822</td>
<td>70.9%</td>
<td>1,171</td>
</tr>
<tr>
<td>Other</td>
<td>806</td>
<td>957</td>
<td>1,129</td>
<td>18.0%</td>
<td>172</td>
</tr>
</tbody>
</table>

Note: COPD (chronic obstructive pulmonary disease), CHF (congestive heart failure), CABG (coronary artery bypass graft). Spending for each service is risk adjusted to reflect differences in patient severity and reflects national standardized payment rates for Medicare, which exclude spending associated with specific missions (e.g., teaching) and geographic payment adjustments for differences in input prices. Spending does not reflect differences in the cost to the facility of providing services. Low-resource-use hospitals are in the bottom quartile of risk-adjusted episode spending and high-resource-use hospitals are in the top quartile of risk-adjusted episode spending (case weighted). Physician spending reflects physician care provided during the hospital stay. Readmission spending includes average spending for hospital care and physician care for the readmission. Other reflects outpatient care and physician care outside the hospital.

previous experience in the private sector. As Medicare is the single largest purchaser of health care, its reports should command greater attention. In addition, because Medicare’s reports would be based on more patients than private plan reports, they should have more statistical validity and acceptance from physicians. Nevertheless, disclosing their performance patterns to physicians alone is not likely to sufficiently motivate and sustain the magnitude of behavior change needed.

Publicly disclosing information on groups or individual providers can have a larger impact on changing behavior. For example, in New York, four years after information on hospital and physician risk-adjusted mortality rates became public, deaths from cardiac surgery fell 41 percent. However, patients did not appear to use the information to choose higher scoring providers (Chassin 2002). In one instance, releasing information to patients did influence their behavior. PacifiCare found that by releasing information on the quality of physician groups at the time of open enrollment, 30,000 enrollees chose the higher quality physician groups (MedPAC 2003).

**RECOMMENDATION 4A**

The Congress should require the Secretary to confidentially report readmission rates and resource use around hospitalization episodes to hospitals and physicians. Beginning in the third year, providers’ relative resource use should be publicly disclosed.

**RATIONALE 4A**

Many providers may not be aware of the resources they use around a hospitalization. Once equipped with this information, they may consider ways to adjust their practice styles and coordinate care to reduce their resource use.

**IMPLICATIONS 4A**

**Spending**

- There are some administrative costs.
- Small savings could result from reduced utilization, but they are indeterminate.

**Beneficiary and provider**

- Beneficiaries would receive better coordination of care to the extent providers respond to this information by better managing care around a hospitalization.
- Because providers may respond by reducing the number of certain types of services, the growth in aggregate payments to some providers may slow over time.

**Financial accountability for service use around hospitalization episodes: A focus on readmission rates**

A program-wide change in financial incentives is needed to encourage providers to be aware of the collective impact of the actions of all the providers involved in care for a patient and to take greater responsibility for the coordination of care.

**Reduce payment for high readmission rates**

Currently, Medicare pays for all admissions based on the patient’s diagnosis regardless of whether it is an initial stay or a readmission for the same or a related condition. As such, it does not reward hospital-based initiatives that can successfully avert many readmissions.

Many readmissions can be avoided by improving certain aspects of care. For example, by furnishing better, safer care during the hospital stay, providers can avoid complications that necessitate readmissions. Attending to patients’ medication needs at discharge also makes a difference. Medication errors after discharge are not uncommon and contribute to readmissions. Improving communication with patients before and after discharge also reduces the need for readmissions. Patients are often not adequately informed about self-care. Similarly, improving communication with other providers is important. Too often discharge summaries are not complete and are not available at the time of the first postdischarge physician visit (see MedPAC’s June 2007 report to the Congress for a fuller discussion of this literature).

Spending on readmissions is considerable and accounts for much of the variation in spending for hospitalization episodes (Table 4-1, p. 93). Within 30 days of discharge, 17.6 percent of admissions are readmitted, accounting for $15 billion in Medicare spending in 2005. Not all these readmissions are avoidable, but some are.

A focus on readmissions can be viewed as a natural extension of the motivation behind recent Medicare payment changes that prohibit Medicare payment for “never events” and for the additional costs associated with patients acquiring preventable complications during a hospitalization. Never events are defined as “serious reportable” events by the National Quality Forum and include things such as leaving unintended objects in the patient as well as death or serious disability from falls, medication errors, and administration of incompatible blood during hospitalization. These payment changes
reflect the sentiment that Medicare should not reward providers for delivering services that could have been avoided through the provision of better care.

The change in payment would mean that hospitals with high risk-adjusted rates of readmissions receive lower average per case payments. To do this, Medicare could first calculate each hospital’s risk-adjusted readmission rate based on the prior year’s performance and then select a benchmark rate (e.g., the average risk-adjusted readmission rate across all hospitals). For the next year, Medicare would reduce payment only for those hospitals with readmission rates above the benchmark rate.

It would be prudent to first focus on making this payment change for a limited number of conditions. DRGs with high volume and high rates of readmission are good candidates. By focusing on a subset of conditions, Medicare and providers can gain needed experience to refine measurement techniques and assess the value of expanding the policy to a broader set of DRGs. Good candidates for the starter set include congestive heart failure, COPD, and coronary artery bypass graft. In Table 4-2, we list those conditions as well as several others to illustrate a potential starter set.

Among the key measurement and payment issues are:

- What is the time period within which readmissions are defined? For the purposes of this discussion, we use 30-day readmission rates, but the interval could be longer (e.g., 60 days) or shorter (e.g., 15 days).

- Should all readmissions be counted in the selected time period or just the subset that are clinically determined to be potentially preventable? For the purposes of the analysis in Table 4-2, we explored identifying potentially preventable readmissions with software developed by 3M (see MedPAC 2007). Potentially preventable readmissions are those that in many cases may be prevented with proven standards of care; however, not all of them can be avoided, even if hospitals follow best practices.

### Table 4-2

<table>
<thead>
<tr>
<th>Initial condition</th>
<th>Type of hospital admission</th>
<th>Number of potentially preventable 30-day readmissions (in thousands)</th>
<th>Percent readmitted within 30 days*</th>
<th>Average Medicare payment for readmissions</th>
<th>Total spending on potentially preventable readmissions (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart failure</td>
<td>Medical</td>
<td>139.2</td>
<td>19.1%</td>
<td>$6,490</td>
<td>$903</td>
</tr>
<tr>
<td>COPD</td>
<td>Medical</td>
<td>85.1</td>
<td>16.5</td>
<td>6,491</td>
<td>552</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>Medical</td>
<td>86.4</td>
<td>13.3</td>
<td>6,681</td>
<td>577</td>
</tr>
<tr>
<td>AMI</td>
<td>Medical</td>
<td>30.5</td>
<td>18.7</td>
<td>6,540</td>
<td>199</td>
</tr>
<tr>
<td>CABG</td>
<td>Surgical</td>
<td>26.6</td>
<td>18.1</td>
<td>8,085</td>
<td>215</td>
</tr>
<tr>
<td>PTCA</td>
<td>Surgical</td>
<td>68.2</td>
<td>14.7</td>
<td>8,342</td>
<td>569</td>
</tr>
<tr>
<td>Other vascular</td>
<td>Surgical</td>
<td>30.0</td>
<td>18.6</td>
<td>10,061</td>
<td>302</td>
</tr>
<tr>
<td><strong>Total for seven conditions</strong></td>
<td></td>
<td>465.9</td>
<td></td>
<td></td>
<td>$3,318</td>
</tr>
<tr>
<td><strong>Total for all DRGs</strong></td>
<td></td>
<td>1,715.5</td>
<td></td>
<td></td>
<td>$12,008</td>
</tr>
<tr>
<td><strong>Percent of total</strong></td>
<td></td>
<td>27.2%</td>
<td></td>
<td></td>
<td>27.6%</td>
</tr>
</tbody>
</table>

Note: COPD (chronic obstructive pulmonary disease), AMI (acute myocardial infarction), CABG (coronary artery bypass graft), PTCA (percutaneous transluminal coronary angioplasty), DRG (diagnosis related group). Analysis is for readmissions within 30 days of discharge from the initial stay. Potentially preventable readmissions are identified using 3M software. Potentially preventable readmissions are readmissions that might be avoided with effective inpatient care, proper discharge planning, and follow-up care. Many potentially preventable readmissions will occur even under the best postdischarge care as a result of general disease progression. Potentially preventable readmissions, therefore, should not be viewed in isolation but should be used as a tool to compare hospitals with some normative standard of expected performance given a hospital’s mix of patient conditions and patient severity.

*30-day readmission rates are calculated based on the set of cases that are potentially eligible for an initial readmission, thus they exclude readmissions and people that died in the hospital from the denominator.

Source: 3M analysis of 2005 Medicare discharge claims data.
What is the benchmark against which hospitals are measured? Should it be average readmission rates across all peers, or should it reflect a higher standard, such as the readmission rate of top performers, to raise expectations?

Should readmissions be defined to include readmissions to a hospital other than the one that had the initial admission? The Commission believes the broader definition is appropriate. Thirty percent of readmissions are to hospitals other than the one with the initial admission; failing to hold hospitals accountable for these readmissions would limit the scope of the policy significantly and continue the current perverse incentives where providers operate in isolation.

The policy involves risk adjusting for the patient’s health status and severity of illness, but should it include additional adjustments for factors such as a high proportion of nonadherent patients or the mix of services available in the geographic area that might affect the likelihood of readmission?

Allow shared accountability

The Commission recognizes that hospitals need physician cooperation in making practice changes that lead to a lower readmission rate. Therefore, the Commission believes that hospitals that would like to financially reward physicians for helping to reduce readmission rates should be permitted to do so. Sharing in the financial rewards or cost savings associated with reengineering clinical care in the hospital is called gainsharing or, preferably, shared accountability. Allowing hospitals this flexibility in aligning incentives could, for example, help them make the goal of reducing unnecessary readmissions a joint one between hospitals and physicians. As discussed in a 2005 MedPAC report to the Congress, shared-accountability arrangements should be subject to safeguards to minimize the undesirable incentives potentially associated with these arrangements. For example, physicians who participate should not be rewarded for increasing referrals, stinting on care, or reducing quality (MedPAC 2005b).

The Commission recognizes that other providers, such as skilled nursing facilities and home health providers, can also be instrumental in avoiding readmissions. The Commission continues to explore ways to encourage these providers to avoid hospital readmissions, particularly with pay-for-performance programs that have readmission rates as a quality measure (MedPAC 2007). Including readmission rates as a pay-for-performance measure should also be considered, particularly for physicians who become a “medical home” (see Chapter 2). The recommended change in readmissions policy will create pressure for hospitals to develop relationships with high-quality post-acute care providers.

Explore virtual bundling and other broader payment changes

The Commission is interested in pursuing other, broader approaches to holding providers accountable for service use around hospitalization episodes. One approach it considered is virtual bundling. Under virtual bundling, providers would not receive a bundled payment; they would continue to receive separate payments from Medicare. However, payments to providers would be subject to the possibility of a reward or a penalty based on their relative aggregate spending for care delivered during a hospitalization episode. This change in financial incentives encourages providers to be aware of the collective impact of the actions of all providers involved in caring for a patient and to take greater responsibility for coordinating care (see text box, p. 98, for a discussion of the specific design of rewards and penalties).

Unlike a change in readmissions payment policy, virtual bundling holds providers accountable for all covered Part A and Part B services throughout the episode, rather than a single type of service. The advantage of this approach is that it does not encourage providers to inappropriately substitute one service for another. However, the Commission recognizes that virtual bundling may be complex to administer. For example, because providers have latitude in when they submit claims and each provider involved in an episode of care bills separately, it may be difficult for CMS to identify related claims in a timely way. Initially, the adjustments may not be appropriately applied, requiring later reconciliation and creating administrative complexity for providers. Moreover, a policy that requires withholding payment may create cash-flow problems for physicians, particularly those in small practices.

On balance, though, the idea of such an inclusive efficiency measure is appealing. For this reason, the Commission recommends that the Secretary explore the feasibility of virtual bundling and other approaches that may encourage greater efficiency around a hospitalization episode and report its findings to the Congress within two years.
**Recommendation 4B**

To encourage providers to collaborate and better coordinate care, the Congress should direct the Secretary to reduce payments to hospitals with relatively high readmission rates for select conditions and also allow shared accountability between physicians and hospitals. The Congress should also direct the Secretary to report within two years on the feasibility of broader approaches, such as virtual bundling, for encouraging efficiency around hospitalization episodes.

**Rationale 4B**

Reducing case payments when readmissions occur for hospitals with high readmission rates encourages providers to better tend to beneficiary needs during a vulnerable juncture in their care and to avoid complications during the initial stay. Research shows that specific hospital-based initiatives to improve communication with beneficiaries and their caregivers, coordinate care after discharge, and improve the quality of care during the initial admission can avert many readmissions. Allowing shared accountability, also known as gainsharing, permits hospitals to make reducing avoidable readmissions a goal of physicians as well. Other policies, such as virtual bundling, may offer promise as a broad efficiency measure but need further consideration.

**Implications 4B**

**Spending**
- There is a potential for savings, but the magnitude depends on the details of the policy.

**Beneficiary and provider**
- Coordination of beneficiaries’ care could improve.
- Providers with high readmission rates would receive lower payments.

**Pilot to test bundled payment**

Bundled payment raises various implementation issues. It requires that Medicare create a new payment rate for a bundle of services and also allows providers discretion in how they will share the payment and what behavior they will reward. Accordingly, the Commission recommends that CMS conduct a pilot program in which providers opt to receive a bundled payment for all covered services under Part A and Part B associated with a hospitalization episode (e.g., the stay plus 30 days). The pilot should be conducted concurrent with the two steps discussed above—information disclosure and a change in payment associated with a high level of readmissions. The pilot should begin applying payment changes to only a selected set of medical conditions.

The objective of the demonstration should be to determine whether bundled payment across an episode of care can improve coordination of care, reduce the incentive for providers to furnish services of low value, improve providers’ efficiency, and reduce Medicare spending while not otherwise adversely affecting the quality of care. Efficient providers should share in the savings from aligned incentives as well.

Extending the window of care to be paid for under the bundled payment beyond the stay reflects the Commission’s commitment to improving incentives to coordinate care across sites, particularly at the time of discharge. Given both the wide variation and the magnitude of spending in the postdischarge period, significant efficiencies should be gained with the incentives included in the bundled-payment approach.

The Commission favors voluntary participation in the pilot because it recognizes that the health care delivery system is neither sufficiently nor uniformly organized in every community. Bundling payment across services in a hospitalization episode requires that Medicare pay a single provider entity (e.g., a hospital and its affiliated physicians), which would be responsible for paying individual providers for the care delivered during the episode. It is not clear whether in all communities providers would be able to agree to accept the bundled payment or would have the infrastructure to manage care and be accordingly rewarded through the bundled-payment provisions.

In choosing to recommend a pilot program as the vehicle to test bundled payment, the Commission seeks to balance the urgent need for a realignment of payment incentives with a healthy respect for the possibility that a well-intentioned policy change can result in unintended consequences. A pilot is more aggressive than a demonstration program in that it can be expanded nationally without the need for further legislation if it proves that the payment policy meets the stated objectives. Eliminating potential disruption and barriers to the expansion of bundled payment would be important in encouraging providers to participate in the pilot and invest in changing the culture, practice patterns, and infrastructure. If providers were concerned that the payment change would last only three years before being suspended pending legislative authorization, they might...
How could virtual bundling be implemented?

To measure resource use for a hospitalization episode, policymakers need to select an episode duration that encompasses the time during the hospital stay and some time postdischarge. Next, CMS could measure resource use, which for our purposes is considered to be aggregate Medicare payments for all services across an episode covered by Part A and Part B and adjusted for the risk of the patient. Each episode of care would begin with a patient’s admission to the hospital. For comparison purposes, the Medicare payments would need to be standardized so they do not reflect payment adjustments for wages and input prices or for special missions, such as medical education or caring for a high proportion of low-income beneficiaries.

CMS would then compare national hospital resource use performance over a previous year and identify relatively high- and low-spending hospital episode levels—perhaps benchmarked at the 75th and 25th percentiles of hospital performance, respectively. Performance relative to the high benchmark would determine eligibility for the penalty. Setting the benchmark significantly above average spending leaves some room for imprecision in risk adjustment, targeting only hospitals and physicians with resource use well above most of their peers.

At the beginning of the following year (and each year thereafter), providers would be informed of the spending benchmarks in advance. All inpatient hospital and inpatient physician services for the selected conditions would be subject to a withhold—that is, CMS would hold some portion of the payment amount in reserve.

Hospitals with relatively high episode spending on average would receive their withhold and possibly bonus payments. The same would apply to the physicians billing for services in these hospitals. Applying a quality test to be eligible for bonus payments would be important to temper the financial incentive for providers to stint on needed care.

Under this approach to virtual bundling, whether a physician’s payment for services provided in the hospital is penalized or rewarded depends on average episode spending across all the episodes assigned to the hospital. By calculating a hospital’s average resource use per episode, CMS would give physicians and hospitals a strong incentive to implement administrative and treatment procedures that improve the performance of everyone practicing at that hospital. Ultimately, holding providers jointly accountable in this way should foster “systemness.”

This concept of holding providers jointly accountable could be applied even more broadly than is outlined above. Ideally, under virtual bundling, the hospital and inpatient physicians would be held accountable—subject to penalties and rewards—as well as providers seeing the patient on an outpatient basis or in a postacute setting within the 30 days after discharge. This would provide symmetric incentives for all involved in the episode to work together and be mindful of their collective performance. A concern is that the policy might adjust payments for providers who had no ability to influence the course of the episode (e.g., an allergist who sees a patient on the 28th day after discharge for a condition clinically unrelated to the one that initiated the episode). Once that issue is resolved, perhaps the incentives under virtual bundling should be expanded. Other policies, including skilled nursing facility pay for performance and physician resource use measurement—two initiatives the Commission previously recommended—should also be pursued to balance incentives (MedPAC 2007).
not be inclined to make the types of investments that are likely to be so critical to meeting program objectives and achieving financial success under this new payment method.

A pilot is less aggressive than fully implementing a national voluntary bundled payment policy. The Commission considered a national voluntary bundled payment approach but found several aspects of implementation particularly thorny, rendering the approach too risky. The policy challenges discussed below point to the rationale for why the Commission opted for a pilot rather than a national program and the spectrum of issues the pilot must address.

**Recommendation 4C**

The Congress should require the Secretary to create a voluntary pilot program to test the feasibility of actual bundled payment for services around hospitalization episodes for select conditions. The pilot must have clear and explicit thresholds for determining whether it can be expanded into the full Medicare program or should be discontinued.

**Rationale 4C**

A pilot would guide policy on a variety of design questions and allow some hospitals and their affiliated physicians to begin receiving bundled payments. It allows CMS to explore how savings could be shared between Medicare and providers and would help minimize the possibility of unintended consequences.

**Implications 4C**

**Spending**

- Spending implications are indeterminate, but the intent of the policy is to produce Medicare savings or, at a minimum, be budget neutral.

**Beneficiary and provider**

- Coordination of beneficiaries’ care should improve.
- The pilot should align provider incentives, allowing them to share in savings resulting from greater efficiency.

**Achieving Medicare savings**

The Commission intends for bundled payments to achieve Medicare savings but has identified a number of challenges that must be addressed. First, making bundled payment voluntary has implications for how payment can be set to achieve savings, which raises concern about the administrative ease of the policy. Considering the payment alternatives can help to illustrate the challenge. For example, payment amounts for each bundle can be set at a national or regional average, similar to the way DRG rates were initially set. But under a voluntary option, if bundled payment rates were set at such an average, only those who would benefit (those with below-average spending across the episode) would likely participate. This dynamic would result in higher rather than lower Medicare spending.

An alternative way to set payment levels that is more likely to achieve savings is to calculate each provider’s baseline spending amount and negotiate a discount from that rate. This approach was used in the heart bypass demonstration in the 1990s. However, CMS found that making this hospital-specific baseline calculation was administratively consuming. Accordingly, using this payment method, which may be necessary to achieve savings, requires that CMS start bundled payment in the context of a pilot, where it can limit the number of participants and select providers in different markets and with different integration models. Confining the policy approach in this way would allow CMS to manageably experiment with how best to streamline the calculation to minimize the administrative burden while ensuring it is fair and transparent to providers.

A related issue for CMS to address is how to determine the level of Medicare savings associated with aligned incentives. In the heart bypass demonstration, the base bundled payment rate was subject to a discount, the specific percentage of which varied by site. For the purposes of the pilot, savings could be achieved through a similar discount from the base rate, through lower future updates for inflation of the base rate, or through a combination of the two. The approach to securing savings could vary depending on the historical spending level of the providers. For example, those with exceptionally high costs could be subject to deeper discounts than other providers with relatively low episode costs. Another design option is to gradually increase provider-specific savings targets over time—so that, for example, a high-cost facility would face steady pressure to continually invest in ways to control its costs.

A second challenge to achieving savings is the potential for bundled payment to create an incentive for providers to produce more admissions. As discussed earlier, providers may recognize that increasing the number of admissions can create a win-win situation for the hospital
and physicians. In the short term, one approach that could dampen incentives to increase volume would be to regulate the financial arrangements between hospitals and physicians. For example, fair market value limits could be applied to physician payment rates. Another possibility would be to measure admission rates and adjust the bundled payment based on the providers’ admission rate relative to a national average. Numerous technical issues would need to be resolved first to ensure fair measurement.

**Addressing payment complexities**

Whether the bundled payment base rate is set on a hospital-specific basis or on some type of average, other payment issues would need to be addressed. Among them are the following:

- How can CMS best adjust for a patient’s relative risk (health status) over the course of a hospitalization episode? While risk adjustment for care during the stay has been well tested, Medicare has less experience in adjusting for differences in postdischarge costs—differences that can stem from variation in patient characteristics, their home environment, and the availability and mix of physicians and post-acute providers in the area.

- How can CMS identify outlier cases and make additional payments to cover the costs associated with exceptionally costly cases? Conversely, how can CMS make adjustments for exceptionally short hospitalization episodes, including those in which a patient dies during the hospitalization?

- How can CMS minimize the risk that hospitals receiving indirect medical education and disproportionate share funds could use them to create an unlevel playing field in the competition for physicians? Indirect medical education and disproportionate share funds could be diverted to attract and reward high-volume physicians caring for high-margin cases.

- How should CMS adjust its regular prospective payment system rates for services like home health care and hospital stays when a portion of the care was delivered in the bundled payment window? For example, home health services are usually paid in 60-day episodes. If Medicare paid for 30 days of care in the hospital bundle, it would need to recalibrate how it pays for home health beyond the end of the hospitalization episode.

- How should beneficiary cost sharing be addressed? With bundling, in which payment is unchanged by the number of visits, policymakers would need to reexamine how to calculate beneficiary coinsurance for visits to physicians and outpatient providers. The interaction with supplemental coverage should also be considered, given that most beneficiaries have supplemental coverage for these cost-sharing requirements.

- Should prescription drug spending, covered under Part D of Medicare, ultimately also be included in the bundled payment?

**Quality incentives**

To address concerns about stinting, providers should be held accountable for quality. While the Commission recognizes that current quality measures are imperfect, CMS has gained experience measuring hospital quality and is continually exploring new measures and refinements to existing measures. In particular, the Commission encourages CMS to develop new measures that will promote coordination of care across settings, patient centeredness, longitudinal assessment, and shared provider accountability in addition to clinical quality.

In considering how providers receiving a bundled payment should be held accountable for quality, policymakers will need to consider the nature of the penalty for subpar levels of quality. For example, would Medicare publicly report the provider’s performance, impose a payment penalty, or exclude the provider from the program?

**The ability and willingness of providers to participate**

Some providers might prefer receiving a bundled payment rather than the separate payments associated with the current payment system (and virtual bundling), but others may not. As discussed earlier, some—particularly those with a history of acrimony and distrust between hospitals and physicians—would not be able or willing to come together to accept and share the bundled payment, at least not initially. Providers might find that they were better off in the current or virtual bundling system. Determining the relative advantage of each system would depend not only on the payment rate a provider would receive but also on the provider’s assessment of the impact of the bundled payment on costs.

Although bundling creates incentives for providers to reduce costs both during the hospitalization and afterward,
it also entails new administrative costs as well as some insurance risk. With respect to administrative costs, providers would need to negotiate contracts specifying how they would plan to share the bundle. This process could be extensive, as hospitals would need to contract with a wide range of physicians and post-acute care providers. The entity receiving the payment would then need to develop an administrative infrastructure to receive and pay bills—not only for its usual set of providers but also for others who might see the patient during the episode. This would likely be an entirely new administrative function for a hospital and could represent a significant financial investment.

Insurance risk refers to the ability of providers to manage the costs of care during the hospitalization episode so that they do not exceed payments. Part of the assessment providers make to manage this risk would concern whether they were responsible for costs clinically related to the initial admission or all costs. Some of the costs within the 30 days after discharge could be unrelated to the clinical circumstances of admission that initiated the hospitalization episode. Those costs might be more difficult to anticipate and manage and may dissuade some from participating. If this issue is perceived to be a significant barrier, some exceptions could be considered (e.g., providers would not be held accountable for costs associated with automobile accidents or other traumas after discharge). Geisinger Health System has pursued this type of approach in creating bundled payments for private sector payers.

**Conclusion**

The Commission is under no illusion that the path of policy change outlined here is easy. Despite our best efforts to anticipate them, unforeseen consequences are likely to be encountered and policies would need to be adjusted. Nevertheless, the Commission believes the status quo is unacceptable. The current payment system is fueling many of the worst aspects of our health care system, leaving beneficiaries’ care uncoordinated and increasing health care costs to an extent that strains beneficiaries’ ability to pay Medicare premiums, the nation’s ability to finance Medicare, and the ability of a large segment of the non-Medicare population to afford insurance.

The Commission has chosen a path that balances the need for change with an understanding that an industry as complex as health care cannot change quickly and that mistakes can carry serious, life-threatening consequences. Nevertheless, the Commission is motivated by a sense of urgency. The price we are paying is too great.
1 As discussed in Chapter 3, hospitals and physicians are finding ways to align incentives in a way that might induce physicians to help hospitals contain costs. Unfortunately, these alignment strategies appear to be aimed at increasing the volume of services performed rather than containing costs.

2 Many readmissions defined as potentially preventable would still occur even if best practices were followed. We cannot clearly identify with claims data what proportion of potentially preventable readmissions actually could be prevented if best practices were followed. Potentially preventable defines the subset of cases in which some reduction in readmissions is possible and savings could be achieved.

3 This increase in volume was not documented when the inpatient prospective payment system (case payments) for hospital stays was implemented. Because physicians, rather than hospitals, admit patients and the inpatient prospective payment system provided no incentive for them to admit more, the lack of volume growth may not be surprising. However, the dynamic could be different under a bundled payment policy because it aligns physicians’ and hospitals’ incentives.

4 3M’s approach identifies readmissions that likely could have been prevented, such as readmissions for COPD after cardiac surgery, some of which may be avoided if COPD medications are appropriately adjusted at discharge. In determining potentially preventable readmissions, 3M excluded certain readmissions—including those related to trauma, cancer, and burns—and then combed through all permutations of diagnoses for an initial stay and for a readmission and evaluated the likelihood that a given readmission diagnosis was related to the first admission and, therefore, was potentially preventable.

5 Skilled nursing facility coinsurance does not begin until the 20th day of the stay, so it is not affected by a more modest bundling approach. Other services beneficiaries may use during the hospitalization episode are not currently subject to cost sharing, including home health, laboratory services, durable medical equipment, and readmissions.
References


