JUNE 2013

REPORT TO THE CONGRESS

Medicare and the Health Care Delivery System

EMBARGOED UNTIL RELEASE JUNE

MEDPAC Medicare Payment Advisory Commission

MEDPAC Medicare Payment Advisory Commission

The Medicare Payment Advisory Commission (MedPAC) is an independent congressional agency established by the Balanced Budget Act of 1997 (P.L. 105–33) to advise the U.S. Congress on issues affecting the Medicare program. In addition to advising the Congress on payments to health plans participating in the Medicare Advantage program and providers in Medicare's traditional fee-for-service program, MedPAC is also tasked with analyzing access to care, quality of care, and other issues affecting Medicare.

The Commission's 17 members bring diverse expertise in the financing and delivery of health care services. Commissioners are appointed to three-year terms (subject to renewal) by the Comptroller General and serve part time. Appointments are staggered; the terms of five or six Commissioners expire each year. The Commission is supported by an executive director and a staff of analysts, who typically have backgrounds in economics, health policy, and public health.

MedPAC meets publicly to discuss policy issues and formulate its recommendations to the Congress. In the course of these meetings, Commissioners consider the results of staff research, presentations by policy experts, and comments from interested parties. (Meeting transcripts are available at www.medpac.gov.) Commission members and staff also seek input on Medicare issues through frequent meetings with individuals interested in the program, including staff from congressional committees and the Centers for Medicare & Medicaid Services (CMS), health care researchers, health care providers, and beneficiary advocates.

Two reports—issued in March and June each year—are the primary outlets for Commission recommendations. In addition to annual reports and occasional reports on subjects requested by the Congress, MedPAC advises the Congress through other avenues, including comments on reports and proposed regulations issued by the Secretary of the Department of Health and Human Services, testimony, and briefings for congressional staff.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

JUNE 2013

REPORT TO THE CONGRESS

Medicare and the Health Care Delivery System

EMBARGOED FOR RELEASE UNTIL 12:01 AM JUNE 14, 2013

MEDPAC Medicare Payment Advisory Commission

425 Eye Street, NW • Suite 701 • Washington, DC 20001
(202) 220-3700 • Fax: (202) 220-3759 • www.medpac.gov

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

MEDPAC Medicare Payment Advisory Commission

425 Eye Street, NW • Suite 701
Washington, DC 20001
202-220-3700 • Fax: 202-220-3759
www.medpac.gov

Glenn M. Hackbarth, J.D., Chairman
Michael Chernew, Ph.D., Vice Chairman
Mark E. Miller, Ph.D., Executive Director

EMBARGOED FOR RELEASE UNTIL 4:00PM JUNE 14, 2013

June 14, 2013

The Honorable Joseph R. Biden
President of the Senate
U.S. Capitol
Washington, DC 20510

The Honorable John A. Boehner
Speaker of the House
U.S. House of Representatives
U.S. Capitol
Room H-232
Washington, DC 20515

Dear Mr. President and Mr. Speaker:

I am pleased to submit the Medicare Payment Advisory Commission's June 2013 *Report to the Congress: Medicare and the Health Care Delivery System*. This report fulfills the Commission's legislative mandate to evaluate Medicare payment issues and to make recommendations to the Congress.

The report contains nine chapters. In the first six chapters, we consider issues addressing both broad questions confronting the program, such as how to incorporate private plan and fee-for-service Medicare in one system, and more sector-specific issues, such as the new hospital readmissions policy. The chapters include:

- a chapter describing a new payment model we refer to as competitively determined plan contributions.
- a chapter addressing Medicare payment differences across ambulatory settings.
- a chapter examining creating bundled payments for hospitalization episodes that include post-acute care and other services.
- a chapter examining options for refining Medicare's new hospital readmissions reduction program.
- a chapter analyzing hospice payment policy issues.
- a chapter discussing the care needs for dual-eligible beneficiaries.

We also include three chapters on reports mandated by the Congress in the Middle Class Tax Relief and Job Creation Act of 2012. The Commission voted on the recommendations in these reports in November 2012 to best advise the Congress on provisions that were scheduled to expire at the end of calendar year 2012. The chapters include:

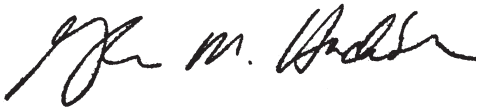
- a chapter on Medicare ambulance add-on payments and other aspects of the payment system.
- a chapter on geographic adjustment of payments for the work of physicians and other health professionals under the physician fee schedule.

- a chapter on Medicare payment for outpatient therapy services.

In an appendix, as required by law, we review CMS's preliminary estimate of the update to payments under the physician fee schedule for 2014.

I hope you find this report useful as the Congress continues to grapple with the difficult task of controlling the growth of Medicare spending while preserving beneficiaries' access to high-quality care and providing sufficient payment for efficient providers.

Sincerely,



Glenn M. Hackbarth, J.D.

Enclosure

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

Acknowledgments

This report was prepared with the assistance of many people. Their support was key as the Commission considered policy issues and worked toward consensus on its recommendations.

Despite a heavy workload, staff members of the Centers for Medicare & Medicaid Services and the Department of Health and Human Services were particularly helpful during preparation of the report. We thank Melanie Bella, Susan Bogasky, Sophia Chan, Patrick Conway, Amanda Copsey, Kate Goodrich, Nancy Harrison, Zinnia Harrison, Marc Hartstein, Katherine Lucas, Pamela Pelizzari, Elizabeth Richter, Anne Tayloe-Hauswald, Randy Throndset, Traci Vitek, Pam West, and Stuart Wright.

The Commission also received valuable insights and assistance from others in government, industry, and the research community who generously offered their time and knowledge. They include Rochelle Archuleta, Richard Averill, Tom Bradley, James Cosgrove, Teresa Coughlin, Allen Dobson, William Dombi, Theresa Forster, Ron Fried, Barbara Gage, Dave Gans, David Gifford, Kurt Gillis, April Grady, Ronald Gresch, Peter Gruhn, Peter Hussey, Ashish Jha, Jonathan Keyserling, Joanna Kim, Harlan Krumholtz, Gayle Lee, Kathy Lester, Susan Levine, Keith Lind, Marian Lowe, Sean MaCurdy, Paul Masi, Sharon McIlrath, Christina Metzler, Lyle Nelson, Tricia Newman, Pam Parker, Robert Reischauer, Hugh Roghmann, Lisa Satterfield, Kathleen Sheehan, Sherry Smith, Steve Speil, Caroline Steinberg, Jim Vertrees, Guan Wang, Howard Weiss, Mary Wheatley, Daniel Ji-Heon Yang, and Stephen Zuckerman.

Once again, the programmers at Social and Scientific Systems provided highly capable assistance to Commission staff. In particular, we appreciate the hard work of Valerie Aschenbach, Daksha Damera, Debbie Johnson, John May, Shelley Mullins, Mary Beth Spittel, and Charles Thomson.

Finally, the Commission wishes to thank Cay Butler, Hannah Fein, and Melissa Lux for their help in editing and producing this report. ■

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

Table of contents

Acknowledgments v

Executive summary xi

Chapters

1 Competitively determined plan contributions 3
Introduction 5
Part D as an example of a CPC approach 5
Design questions under the CPC approach 6
Analysis of plan bids and availability 15
Issues related to low-income beneficiaries 20
Additional considerations 21

2 Medicare payment differences across ambulatory settings 27
How should Medicare pay for the same ambulatory services in different settings? 31
Equalizing Medicare payment rates across settings for E&M office visits 36
Aligning payment rates between OPDs and physicians' offices for other types of ambulatory services 37
Aligning payment rates between OPDs and physicians' offices for cardiac imaging services 46
Equalizing payment rates between OPDs and ASCs for certain ambulatory procedures 48

3 Approaches to bundling payment for post-acute care 59
Introduction 65
Illustration of how services could be bundled 68
Setting the episode benchmark for the bundle 78
Implications of bundled payments for beneficiaries 83
Conclusion 85

4 Refining the hospital readmissions reduction program 91
Introduction 95
Recent trends in efforts to reduce readmission rates 96
HRRP increased the incentive to reduce readmissions 98
Impact of the HRRP on provider payments 99
Addressing long-term issues with the readmission policy 100
Conclusions and implications for future research 110

5 Medicare hospice policy issues 117
Background 121
Improving Medicare's payments for hospice services 122
Improving hospice accountability 130
Hospice provided in nursing facilities 135
Future research 138

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

6 Care needs for dual-eligible beneficiaries **145**
Introduction **149**
Overview of dual-eligible beneficiaries **149**
Medicare and Medicaid spending on dual-eligible beneficiaries **153**
Care delivery systems for dual-eligible beneficiaries **157**

7 Mandated report: Medicare payment for ambulance services **167**
Introduction **171**
Framework to evaluate policy issues **171**
Background **172**
Growth in use of Medicare ambulance services suggests no access problems, but more rapid growth in nonemergency services raises concerns **177**
Dialysis-related ambulance transports raise fraud and abuse concerns **182**
Costs of providing ambulance services are difficult to isolate and policies to help cover costs where needed are not efficiently targeted **183**
Summary and recommendations **185**

8 Mandated report: Geographic adjustment of payments for the work of physicians and other health professionals **197**
Introduction **201**
Arguments for and against the work GPCI **206**
Empirical analysis of the work GPCI's validity and its effects on access and spending **210**
Recommendation **221**

9 Mandated report: Improving Medicare's payment system for outpatient therapy services **229**
Introduction **233**
Medicare payment policy for outpatient therapy services **235**
Medicare spending on outpatient therapy services **239**
Recommendations **244**

Appendixes

A Review of CMS's preliminary estimate of the 2014 update for physician and other professional services **259**

B Commissioners' voting on recommendations **265**

Acronyms **271**

More about MedPAC

Commission members **275**

Commissioners' biographies **277**

Commission staff **281**

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Executive summary

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

Executive summary

As part of its mandate from the Congress, each June the Commission reports on Medicare payment systems and on issues affecting the Medicare program, including changes in health care delivery and the market for health care services. In this report, we consider issues addressing both broad questions confronting the program, such as how to incorporate private plan bidding and fee-for-service in one system, and more sector-specific issues, such as the new hospital readmissions policy. In the first six chapters of this report we consider:

- ***A new payment model we refer to as competitively determined plan contributions (CPC)—***In that model a federal contribution toward the coverage of the Medicare benefit is determined based on the cost of competing options for the coverage, including those offered by private plans and by the traditional Medicare fee-for-service (FFS) program. Specifically, CPC has two defining principles: First, beneficiaries receive a competitively determined federal contribution to buy Medicare coverage; second, beneficiaries' individual premiums vary depending on the coverage option they choose.
- ***Medicare payment differences across ambulatory settings—***Medicare's payment rates often vary for the same (or similar) ambulatory services provided to similar patients in different settings, such as physicians' offices and hospital outpatient departments (OPDs). These variations raise questions about how Medicare should pay for the same service when it is delivered in different settings.
- ***Bundling post-acute care (PAC) services—***Under traditional FFS Medicare, the program pays widely varying rates for the care beneficiaries can receive following a hospital stay among four PAC settings—skilled nursing facilities, home health care, inpatient rehabilitation hospitals, and long-term care hospitals. Nationwide, utilization rates for PAC services vary widely for reasons not explained by differences in beneficiaries' health status. Bundling a range of services together could improve incentives to provide needed care more efficiently.
- ***Refining Medicare's hospital readmissions reduction program—***The Congress enacted a new hospital readmissions reduction program in 2010 that was implemented by CMS in October 2012. This program is a step forward. However, refinements are needed to improve the program and achieve the aim of reducing readmissions, the penalties assessed on hospitals, and Medicare spending on readmissions.
- ***Hospice payment policy issues—***Issues include implementing payment reforms to better match costs and payments, improving accountability for very long stays, understanding trends in hospice patients who are discharged alive, and revising payment for hospice care in nursing facilities.
- ***The care needs of dual-eligible beneficiaries—***We review the pathways to dual-eligible status, Medicare and Medicaid spending on dual-eligible beneficiaries, and best practices from Medicare–Medicaid coordination programs.

We also include three reports mandated by the Congress in the Middle Class Tax Relief and Job Creation Act of 2012. The Commission voted on the recommendations in these reports in November 2012 to best advise the Congress on provisions that were scheduled to expire at the end of calendar year 2012. The reports concern:

- ***Medicare ambulance add-on payments—***The Commission examined the impacts of certain temporary add-on payments made under the ambulance fee schedule on ambulance providers' Medicare margins and other aspects of the payment system.
- ***Geographic adjustment of payments for the work effort of physicians and other health professionals under the physician fee schedule—***The Commission assessed whether any adjustment is appropriate to distinguish the difference in work effort by geographic area and, if so, what the level of the adjustment should be and where it should be applied.
- ***Medicare payment for outpatient therapy services—***The Commission addressed two specific areas: (1) how to improve the outpatient therapy benefit under Medicare Part B so that the benefit is better designed to reflect patients' functional limitations and severity, as well as the therapy needs of the patient; and (2) private-sector initiatives to manage the outpatient therapy benefit.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

In an appendix, as required by law, we review CMS's preliminary estimate of the update to payments under the physician fee schedule for 2014.

Competitively determined plan contributions

In Chapter 1, we present an overview of a payment model based on government contributions toward purchasing Medicare coverage—an approach we call CPC—and focus on key design elements Medicare would have to consider in adopting such a model. The Commission uses the term CPC to broadly describe a federal contribution toward the coverage of the Medicare benefit, based on the cost of competing options for the coverage, including those offered by private plans and by the traditional Medicare FFS program. Specifically, CPC has two defining principles: First, beneficiaries receive a competitively determined federal contribution to buy Medicare coverage; second, beneficiaries' individual premiums vary depending on the coverage option they choose. CPC encompasses a set of concepts related to premium support or defined contributions.

An argument for a CPC approach is that a market-based model in which private plans compete with FFS for enrollment might do better at keeping premiums and overall spending down in certain markets than a model based on unrestricted FFS with open-ended provider participation. A successful CPC model would depend on strong competition between FFS and private plans offering lower premiums and more attractive benefits and informed beneficiaries who respond to those offerings. Competing private plans, however, do not necessarily lower cost to the Medicare program if the rules defining how they compete and how they are paid do not encourage them to do so. For example, the current Medicare Advantage (MA) program produces a higher cost to Medicare than the traditional FFS program in many markets. Therefore, whether a CPC approach can lower overall Medicare spending will depend on the characteristics of each market, the specific design of the model, and how different components of the model interact.

In its most basic form, a CPC approach consists of three main actors with different roles. The Medicare program designs the system and makes the rules that result in the CPC contribution amount and payments to plans. (The program also continues to administer the FFS benefit and set FFS payment rates.) Private plans, the second actor, use these rules to guide their business decisions, such as whether to enter or exit a particular market, how much to bid (which in turn is a factor in determining the level of the government contribution amount), and which benefit designs or products to offer. Beneficiaries, the third actor, then make their purchasing decisions and choose a private plan or Medicare FFS for their Medicare coverage based on the premiums of offered plans (including Medicare FFS) and the contribution from Medicare. Their choice of coverage determines the premiums they pay.

We illustrate implications of certain design elements using an analysis of private plan bids under the current MA program as a proxy. We also discuss key issues specific to low-income beneficiaries under a CPC approach. The purpose of Chapter 1 is to focus on a few first-order questions and issues that must be addressed in designing a CPC model and understand their implications for beneficiaries, private plans, and the Medicare program.

Medicare payment differences across ambulatory settings

Medicare's payment rates often vary for the same (or similar) ambulatory services provided to similar patients in different settings, such as physicians' offices and OPDs. As an example of payment differences, in 2013 Medicare pays 141 percent more when a level II echocardiogram is provided in an OPD rather than in a freestanding physician's office. Such variations raise questions about how Medicare should pay for the same service when it is delivered in different settings, which we address in Chapter 2.

If the same service can be safely provided in different settings, a prudent purchaser should not pay more for that service in one setting than in another. Payment variations across settings may encourage arrangements among providers that result in care being provided in higher paid settings, thereby increasing total Medicare spending and beneficiary cost sharing. In general, the Commission maintains that Medicare should base payment rates on the resources needed to treat patients in the most efficient setting, adjusting for differences in patient severity, to the extent that severity differences affect costs.

There is increased urgency to address payment variations across settings because many services have been migrating from physicians' offices to the usually higher paid OPD setting as hospital employment of physicians has grown. This shift toward OPDs has resulted in higher program spending and beneficiary cost sharing without significant changes in patient care. From 2010 to 2011, for example,

EMBARGOED FOR RELEASE UNTIL 12:01AM JUNE 14, 2013

the share of evaluation and management (E&M) office visits provided in OPDs increased by 9 percent, the share of echocardiograms provided in OPDs increased by about 15 percent, and the share of nuclear cardiology tests provided in OPDs increased by about 22 percent.

In our March 2012 report, the Commission recommended that Medicare payment rates should be equal whether an E&M office visit is provided in an OPD or in a freestanding office. We focused on nonemergency E&M office visits because they are largely unaffected by differences between OPDs and freestanding offices, such as patient severity and the packaging of services. In Chapter 2, we examine other services that meet the Commission's principles for aligning payment rates across settings.

- We identified 66 groups of services provided in OPDs and offices that are frequently performed in physicians' offices, are infrequently provided with an emergency department (ED) visit when furnished in an OPD, and have average patient severity that is no greater in OPDs than in freestanding offices. Changing OPD payment rates for these services to reduce payment differences between settings would reduce program spending and beneficiary cost sharing by $900 million in one year.
- Three of these 66 groups of services include cardiac imaging services, which have been migrating rapidly from freestanding offices to OPDs as hospital employment of cardiologists has grown. In addition, payment rates are much higher when these services are provided in OPDs than in offices. Reducing OPD payment rates for these three groups of cardiac imaging services would reduce program spending and beneficiary cost sharing by $500 million in one year.
- We also identified 12 groups of services that are commonly performed in ambulatory surgical centers (ASCs) for which the OPD payment rates could be reduced to the ASC level. These groups of services are infrequently provided with an ED visit when furnished in an OPD and have average patient severity that is no greater in OPDs than in ASCs. This policy would reduce Medicare program spending and beneficiary cost sharing by about $600 million per year.

We are concerned about the impact of these policies on hospitals that provide ambulatory services to a disproportionate share of low-income patients, who may be more likely than other patients to use an OPD as their usual source of care. Because large reductions in Medicare revenue for these hospitals could adversely affect access to physician services for these patients, we consider a stop-loss policy that would limit the loss of Medicare revenue for these hospitals.

Bundling post-acute care services

Under traditional FFS Medicare, the program pays widely varying rates for the care beneficiaries can receive following a hospital stay in the four PAC settings (skilled nursing facilities, home health care, inpatient rehabilitation hospitals, and long-term care hospitals). Nationwide, use rates for PAC services vary widely for reasons not explained by differences in beneficiaries' health status. In 2008, the Commission recommended that the Congress require the Secretary to create a pilot program to test the feasibility of bundled payment around a Medicare hospitalization for selected conditions.

Under a bundled approach, one payment would cover all services furnished across all settings and providers during a defined period of time after a triggering event (e.g., all care provided within 90 days after a hospital discharge). By tying a provider's payment to services furnished beyond "its four walls," bundled payments encourage accountability for cost and quality across a spectrum of care. In contrast to FFS, providers would have an incentive to coordinate care and provide only clinically necessary services rather than furnishing more services to generate revenue. The scope and duration of the bundle and the payment incentives will shape the pressures providers experience to change their current practice patterns.

In Chapter 3, we discuss design aspects of a bundled payment—such as the scope of services covered, the time span, the mechanics of paying multiple providers for a single episode, and ways to ensure quality—and the advantages and disadvantages of possible approaches. Each decision involves trade-offs between increasing the opportunities for care coordination and requiring providers to accept risk for care beyond what they furnish. We illustrate the trade-offs inherent in these design decisions using a design consistent with Commissioners' support for more inclusive bundles that do not require providers to have an infrastructure to make and receive payments for other providers. The illustrative bundle includes the initial hospital stay and any potentially avoidable readmissions, PAC, and physician services furnished during the institutional care that occur within 90 days after

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

discharge from the hospital. CMS would compare actual average spending for a condition with a benchmark, return some portion of payments if average spending is below the benchmark, and put providers at some risk for spending above the benchmark. We use this illustration to begin a conversation about how best to proceed with this potential payment reform, acknowledging that many other designs are possible, each with different strengths and weaknesses.

Bundled payment is one way to begin to change the delivery system away from the fragmented care inherent in FFS and toward shared accountability that encourages care coordination and cost control during an episode of care. Bundled payments would give providers, especially those not ready to assume the greater risks associated with larger payment reforms (such as accountable care organizations), a way to gain experience in coordinating care that extends across a spectrum of providers and settings. Bundling could help facilitate continued progress toward larger delivery system reforms. The specific design of bundles will shape the risk for providers and the opportunities for care coordination. Over the next year, the Commission plans to continue its conversation about how best to proceed with this potential payment reform.

Refining Medicare's hospital readmissions reduction program

In 2008, the Commission reported on a series of payment reforms to encourage care coordination among physicians, hospital administration, and providers outside the hospital. These initiatives included testing the bundling of payments around an episode, gainsharing between hospitals and physicians, and a direct incentive to reduce hospital readmissions. While not all readmissions can be prevented, there is a concern that Medicare readmission rates have consistently been too high and could be lowered through greater coordination of care.

Following the Commission's report and a series of studies illustrating the problem of readmissions, the Congress enacted a readmissions reduction program in 2010. The program includes a penalty that reduces Medicare payments in 2013 to hospitals that had above-average readmission rates from July 2008 through June 2011. Following enactment in 2010, there was a small decline in risk-adjusted readmission rates. While readmission rates have declined slightly, we find 12.3 percent of all 2011 Medicare admissions were still followed by a potentially preventable readmission. The readmission policy has encouraged hospitals to look beyond their walls and improve care coordination across providers to reduce readmissions, and the Commission finds that the policy should be refined and continued.

In Chapter 4, we consider four refinements to address issues with the current policy and to continue moving toward improved care coordination and outcomes:

- First, have a fixed target for readmission rates. Penalties would go down when industry performance improves. Under current policy, aggregate penalties remain constant when national readmission rates decline and penalties for individual hospitals vary depending on their performance relative to the new average.
- Second, use an all-condition readmission measure to increase the number of observations and reduce the random variation that single-condition readmission rates face under current policy.
- Third, use an all-condition readmission measure to attenuate the negative correlation between mortality rates and readmission rates that exist for some conditions. For some conditions (e.g., heart failure) there is a negative correlation between mortality rates and readmission rates; for other conditions there is no significant relationship. Using an all-condition readmission measure would remove the problem of systematically having higher readmission penalties for hospitals with low mortality rates for conditions such as heart failure. Over the longer term, we could also pursue a joint readmission/mortality measure.
- Fourth, evaluate a hospital's readmission rate against rates for a group of peer hospitals with a similar share of poor Medicare beneficiaries as a way to adjust readmission penalties for socioeconomic status. Under current policy, hospitals' readmission penalties are positively correlated with their share of low-income patients.

These refinements would help overcome issues with current policy, maintain or increase the average hospital's incentive to reduce readmissions, increase the share of hospitals that have an incentive to reduce readmissions, and not increase Medicare spending relative to current law. They would require legislative changes, because the current formula to compute the readmission penalty is set in law. The end goal is to see a decline in readmissions, a decline in penalties paid by hospitals, and a decline in Medicare spending on readmissions.

EMBARGOED FOR RELEASE UNTIL 4:00PM JUNE 21, 2012

Medicare hospice policy issues

The Commission made recommendations in March 2009 to improve the hospice payment system, increase accountability in the benefit, and improve data collection. Since then, several steps have been taken to increase accountability and data collection via the Patient Protection and Affordable Care Act of 2010 (PPACA) and CMS administrative actions. In addition, the Congress gave CMS the authority to revise the hospice payment system as the Secretary determines appropriate as soon as fiscal year 2014.

In Chapter 5, we report on additional analyses we conducted to support hospice payment reform, enhanced accountability, and other areas of concern, including the policy implications of patients discharged alive from hospice and considering whether a different payment rate is warranted for hospice provided to patients living in nursing facilities.

- ***Payment reform—***Using currently available data, the Commission estimated how the labor cost of hospice visits changes over the course of a hospice episode. These data demonstrate a U-shaped pattern of labor costs throughout hospice episodes and offer policymakers the evidence needed to begin reforming the payment system away from the current flat per diem payment. We present an illustrative example of a revised payment system that could be implemented now using existing data. Given the magnitude of hospice spending on long-stay patients, who are more profitable under the current payment system than other patients, it is important that an initial step toward payment reform be taken as soon as possible.
- ***Accountability—***There are two steps needed to improve accountability for hospice payments. First, consistent with a Commission recommendation, PPACA required medical review of hospice stays exceeding 180 days for hospices with an unusually large share of long-stay patients. To date, CMS has not implemented that provision. Our recent analysis of Medicare spending data for hospice stays exceeding 180 days shows that these expenditures are sizable—underscoring the need for medical review of very long stays. Second, 18 percent of hospice patients in 2010 were discharged alive from hospices. Among some hospices the rates were much higher. Little is known about what happens to those hospice patients after they are discharged. The Commission's new analysis of rates of live discharges and outcomes by beneficiary and provider characteristics supports the need to ensure that beneficiaries are appropriate candidates for hospice at initial admission and throughout long episodes.
- ***Payment for hospice care in nursing facilities—***The Commission has previously raised the issue of whether a different payment structure is needed for hospice care in nursing facilities. Our prior work has shown that hospices with more patients in nursing homes compared with other hospices have higher-than-average Medicare margins. In Chapter 5, we explore the potential for a reduction to the hospice payment rate for patients residing in nursing facilities in light of the overlap in responsibility between hospices and nursing facilities for those patients.

Care needs for dual-eligible beneficiaries

In Chapter 6, we discuss Medicare and Medicaid spending and the care needs of dual-eligible beneficiaries. Dual-eligible beneficiaries are eligible for both Medicare and Medicaid benefits. In 2011, about 19 percent (10 million) of Medicare beneficiaries were dual eligible. The dual-eligible population is diverse and includes individuals with multiple chronic conditions, difficulties with activities of daily living, and cognitive impairments such as dementia; individuals with physical disabilities, developmental disabilities, and severe mental illness; and some individuals who are relatively healthy. Because of their diverse needs, dual-eligible beneficiaries require a mix of medical care, long-term care, behavioral health services, and social services. Given the challenges this population faces in accessing services through two separate payer and delivery systems, programs that coordinate dual-eligible beneficiaries' Medicare and Medicaid benefits (which we refer to as Medicare–Medicaid coordination programs) have the potential to improve dual-eligible beneficiaries' access to services and quality of care.

We conducted structured interviews with stakeholders (federally qualified health centers (FQHCs), community health centers (CHCs), primary care physicians, health systems, behavioral health providers, aging services organizations, community-based care managers, beneficiary advocates, and health plans) in five states with Medicare–Medicaid coordination programs. In general, the interviewees reported that dual-eligible beneficiaries (both those enrolled in Medicare–Medicaid coordination programs and those not enrolled in those programs) tend to have more complex medical and nonmedical needs than non-dual-eligible Medicare beneficiaries. Dual-eligible beneficiaries were consistently reported to need

EMBARGOED FOR RELEASE UNTIL 6:00PM JUNE 14, 2013

high-contact, on-the-ground, intensive care management given that their issues are not likely to be resolved in a few physician visits. Dual-eligible beneficiaries' providers tend to operate only in their respective settings and communication with one another across settings regarding a patient's care is not common. Medicare–Medicaid coordination programs focus on getting providers in various settings—for example, hospitals, physicians' offices, and social service agencies, among others—to communicate with one another regarding a beneficiary's care. These programs also seek to leverage community-based resources, including care coordination activities at FQHCs and CHCs. Many FQHCs and CHCs are uniquely positioned to coordinate care for dual-eligible beneficiaries because they provide primary care, behavioral health services, and care management services, often at the same clinic site.

Mandated report: Medicare payment for ambulance services

Section 3007(e) of the Middle Class Tax Relief and Job Creation Act of 2012 directed the Commission to report to the Congress by June 15, 2013, on the Medicare ambulance fee schedule. Specifically, the Commission was directed to examine the impact of certain temporary add-on payments made under the ambulance fee schedule on ambulance providers' Medicare margins. In addition to the three temporary add-ons, two permanent add-on payment policies apply if the ZIP code from which a patient is transported is rural.

In Chapter 7, we find:

- Of the approximately $5.3 billion in Medicare payments for ambulance services in 2011, the three temporary add-on payment policies accounted for about $192 million and the two permanent add-on payment policies accounted for approximately $220 million more.
- There was no evidence of Medicare beneficiaries having difficulty accessing ambulance services. We observed consistent growth in ambulance service use per beneficiary and spending for these services. The number of ambulance suppliers participating in Medicare grew steadily from 2007 to 2011.
- Medicare ambulance volume grew by roughly 10 percent from 2007 to 2011, and basic life support (BLS) nonemergency services grew more rapidly than more complex types of services. Much of the growth in BLS nonemergency transports was concentrated among a small share of ambulance suppliers and providers. Many of the newest suppliers entering the marketplace focus on providing BLS nonemergency services. Further, even more pronounced growth has occurred in nonemergency ambulance transports to and from dialysis facilities, and there is tremendous variation across states and territories in per capita spending for those types of transports.
- Medicare currently does not collect supplier cost data to set or update ambulance payment rates. The Government Accountability Office (GAO) surveyed a sample of ambulance suppliers in 2012 and found that the 2010 median Medicare margin for the survey sample was 2 percent with the temporary add-ons and estimated that the margin would be –1 percent without the add-ons. GAO found that higher costs were associated with lower volume, more emergency versus nonemergency transports, and higher levels of government subsidies. The recent entry of for-profit suppliers and private equity firms into the ambulance industry indicates that profit opportunities in the industry were available.
- The current ground ambulance add-ons are not well targeted.

On the basis of these findings, the Commission made two recommendations to the Congress. The first recommendation would allow the temporary add-ons to expire. Because their expiration might raise concerns about access, the recommendation includes two steps to maintain access: One step is to direct the Secretary to rebalance the relative values for ambulance services by lowering the relative value of BLS nonemergency services and increasing the relative values of other ground transports. Rebalancing should be budget neutral relative to current law and maintain payments (and thus access) for other ground transports at their level before expiration of the temporary ground ambulance add-on. The second step directs the Secretary to replace the permanent rural short-mileage add-on for ground ambulance transports with a new budget-neutral adjustment directing increased payments to ground transports originating in geographically isolated, low-volume areas to protect access in those areas.

Because of evidence of clinically inappropriate use of certain BLS nonemergency transports, we made a second recommendation that the Congress direct the Secretary to: more precisely define medical necessity requirements for both emergency and nonemergency (recurring and nonrecurring) ground ambulance transport services;

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 17, 2013

develop a set of national edits based on those guidelines to be used by all claims processors; identify geographic areas and ambulance suppliers and providers that display aberrant patterns of use; and use statutory authority to address clinically inappropriate use of BLS nonemergency ground ambulance transports. Reducing clinically inappropriate use of BLS nonemergency services should result in program savings.

Mandated report: Geographic adjustment of payments for the work of physicians and other health professionals

The Middle Class Tax Relief and Job Creation Act of 2012 also mandated that the Commission consider whether Medicare's fee schedule for physicians and other health professionals should include an adjustment to reflect geographic variation in the cost of these professionals' labor. The fee schedule includes geographic practice cost indexes (GPCIs) that adjust payment rates for costs such as rent and office staff wages that vary depending on the geographic area where a service is furnished. However, arguments for and against one of the GPCIs—the GPCI for the work effort of the physician or other health professional—have persisted since the development of the fee schedule in the 1980s. The chief argument made in favor of a work GPCI is that the cost of living varies across areas. If payment rates for fee schedule services are not adjusted with a work GPCI, the supply of physicians and other health professionals might not be sufficient in high-cost areas and beneficiary access to care in those areas could suffer. The basic argument against a work GPCI is one of equity; work should be rewarded equally regardless of the location where a service is furnished. The Congress directed the Commission: (1) to consider whether there should be a work GPCI and, if so, what the level of the GPCI should be and where it should be applied, and (2) to assess the impact of the current work GPCI, including its impact on access to care.

In Chapter 8, we find that there is evidence of a need for some level of geographic adjustment of fee schedule payments for professional work. Cost of living varies geographically. Earnings vary geographically for the professionals in the work GPCI's reference occupations. To the extent we can measure geographic variation in physicians' earnings, those earnings vary.

However, the current GPCI is flawed. Conceptually, it is based on the earnings of professionals in certain reference occupations, but the labor market for those professionals may not resemble the labor market for physicians and other health professionals. Implementation of the work GPCI is flawed because there appear to be no sources of data on the earnings of physicians and other professionals of sufficient quality to validate the GPCI. We are unable to determine whether the work GPCI has an effect on the quality of care, but there is no evidence that the GPCI affects access. Moreover, any access concerns may be better addressed through other targeted policies, such as the health professional shortage area bonus and the primary care bonus.

In light of the need for some geographic adjustment, but recognizing that there are insufficient data in the short run to revise the work GPCI, the Commission recommends that Medicare payments for the work effort of physicians and other health professionals be geographically adjusted. The adjustment should reflect geographic differences in labor costs per unit of output across markets for physicians and other health professionals. Further, the Congress should allow the GPCI floor to expire (the GPCI floor defines the work GPCI in certain states to be no less than the national average), adjust payments for the work of physicians and other health professionals only by the current one-fourth GPCI (because of uncertainty in the data), and direct the Secretary to develop an adjuster to replace it.

Mandated report: Improving Medicare's payment system for outpatient therapy services

Medicare's outpatient therapy benefit covers services for physical therapy, occupational therapy, and speech–language pathology. Outpatient therapy services are designed to restore function patients have lost due to illness or injury and to maintain improved function. These services can be beneficial when necessary but may be subject to inappropriate use. The Middle Class Tax Relief and Job Creation Act of 2012 required the Commission to study therapy services provided under Medicare Part B and make recommendations for reforming Medicare's payment system for outpatient therapy. The legislation also directed the Commission to examine: (1) how to better document patients' functional limitations and severity of condition and thus better assess patients' therapy needs and (2) private sector initiatives to manage outpatient therapy.

In 2011, Medicare spending on outpatient therapy totaled $5.7 billion for 4.9 million beneficiaries. There are two annual spending limits (caps) on outpatient therapy services per beneficiary to restrain excessive spending and utilization. There is one cap for physical therapy and speech–language pathology services combined and

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

another cap for occupational therapy services. Each cap equals $1,900 in 2013. A broad exceptions process allows providers to deliver services above either spending cap relatively easily, limiting the effectiveness of the caps. A manual review process was implemented in October 2012 for beneficiaries whose annual spending on physical therapy and speech–language pathology services combined or on occupational therapy exceeds $3,700. However, the manual review process does not apply to the majority of beneficiaries who exceed the caps. While the caps are permanent by statute, the exceptions process expires periodically under current law unless explicitly reauthorized by the Congress.

Medicare lacks clear guidelines to determine the appropriate frequency, type, and duration of services for patients needing outpatient therapy. Further, Medicare's physician oversight requirements for outpatient therapy are relatively weak. Due to the lack of comprehensive coverage guidelines and effective mechanisms to control volume, the use of outpatient therapy varies widely across the country. Medicare spending on outpatient therapy users in the highest spending areas of the country is five times more than that in the lowest spending areas of the country, even after controlling for differences in patients' health status.

In Chapter 9, the Commission makes three recommendations that are intended to decrease inappropriate use of outpatient therapy services and to provide the program with essential data on patients' conditions, services they received, and outcomes. The recommendations would improve payment accuracy by fully accounting for the efficiencies of a single provider delivering multiple therapy services to a patient on the same day, increase physician oversight of outpatient therapy regimens, and provide physicians and therapy practitioners with clear guidance regarding when such services are medically indicated and the outcomes that should be expected. The recommendations also lay out a rigorous review process designed to minimize the potential for abuse of the outpatient therapy benefit while giving beneficiaries who need higher levels of outpatient therapy the means to obtain it. The Commission's recommendations would increase Medicare spending for outpatient therapy services relative to a policy of hard therapy caps (i.e., caps with no exceptions). However, hard therapy caps would decrease access to therapy services not only for those who might otherwise receive questionable levels of therapy but also for those whose medical conditions appropriately warrant high levels of therapy services.

Review of CMS's preliminary estimate of the 2014 update for physician and other professional services

CMS's preliminary estimate of the 2014 update for physician and other professional services is –24.4 percent. The prescribed reduction is due to a series of temporary increases enacted over several years that—under current law—expire at the end of 2013. Those increases have prevented a series of negative updates under the sustainable growth rate (SGR) formula—the statutory formula for annually updating Medicare's payment rates for physician and other health professional services. If the temporary increases expire, the physician fee schedule's conversion factor must decrease by 26.5 percent. The difference between this reduction and the 2013 update would be the SGR formula's update—specific to 2013—of 2.8 percent. This increase would be applied to the conversion factor after it had been reduced by 26.5 percent.

In the appendix, we provide the Commission's mandated review of CMS's estimate. Absent a change in law, the expiration of the temporary increases and the formula's update for 2013 are very unlikely to produce an update that differs substantially from –24.4 percent. The temporary increases—by far, the largest factor influencing the payment reduction—were specified by law. The 2.8 percent estimate of the SGR update for 2014 could change between now and when CMS would implement the update in January, but any such changes are likely to be small compared with the total reduction prescribed by law.

While the appendix is limited to a review of the preliminary update estimate, the Commission has concerns about the SGR formula as a payment policy. The SGR formula may have resulted in lower updates, but it has failed to restrain volume growth; in fact, for some specialties the formula may have exacerbated growth. In addition, the temporary increases, or "fixes," to override the SGR formula are undermining the credibility of Medicare by engendering uncertainty and frustration among providers, which may be causing anxiety among beneficiaries. In an October 2011 letter to the Congress, the Commission recommended repealing the SGR formula and replacing it with legislatively specified updates that would no longer be based on an expenditure-control formula. We reaffirmed our position in a letter sent to the Congress on April 10, 2013, emphasizing that the time to repeal the SGR is now. ■

EMBARGOED FOR RELEASE UNTIL 1:00 PM JUNE 14, 2013

CHAPTER 1

Competitively determined plan contributions

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

CHAPTER 1

Competitively determined plan contributions

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Chapter summary

The traditional fee-for-service (FFS) benefit design has not changed significantly since Medicare was enacted in 1965. In our June 2012 report, the Commission recommended changes to improve the FFS benefit to give beneficiaries better protection against high out-of-pocket (OOP) spending, such as adding an OOP maximum, and give beneficiaries incentives to make better decisions about their use of discretionary services, such as imposing an additional charge on supplemental coverage.

The Commission recognizes the limitations of benefit changes alone in the Medicare FFS environment with open-ended service use and broad provider participation. Changes in the benefit design would work more effectively in conjunction with other management tools. Therefore, the Commission thinks it is important to explore alternative approaches that align providers' incentives for efficient and appropriate use of health care services, give beneficiaries incentives to make cost-conscious choices, and encourage innovative delivery systems and care management techniques.

Consistent with the goal of encouraging beneficiaries to make cost-conscious choices, this chapter presents an overview of a model based on government contributions toward purchasing Medicare coverage—an approach we call competitively determined plan contributions (CPCs). The Commission uses the term CPC to broadly describe a federal contribution toward coverage of the

In this chapter

- Introduction
- Part D as an example of a CPC approach
- Design questions under the CPC approach
- Analysis of plan bids and availability
- Issues related to low-income beneficiaries
- Additional considerations

Medicare benefit based on the cost of competing options for the coverage, including those offered by private plans and the traditional FFS program. Specifically, CPC has two defining principles: First, beneficiaries receive a competitively determined federal contribution to buy Medicare coverage; second, beneficiaries' individual premiums vary depending on the option they choose.

This chapter focuses on key design elements Medicare would have to consider in adopting such a model. We illustrate implications of certain design elements using an analysis of private plan bids under the current Medicare Advantage program as a proxy. We also discuss key issues specific to low-income beneficiaries under a CPC approach. The purpose of this chapter is to focus on a few first-order questions and issues that must be addressed in designing a CPC model and on their implications for beneficiaries, private plans, and the Medicare program. It is not meant to be a definitive or comprehensive treatise on the CPC approach but a guide to focus discussion of the concept.

A CPC model could be designed to maximize its budgetary impact. To achieve large upfront savings, for example, a CPC model could set the federal contribution for Medicare coverage based on the minimum bid in an area but only up to the current level of program spending. But that is not the Commission's primary objective. Even if the upfront savings were modest, the potential of a CPC approach to change the underlying incentives of plans, providers, and beneficiaries over time and to achieve savings in the long run is worth investigating. The Commission has not evaluated any specific legislative proposals or expressed a position with respect to any specific CPC design. ■

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

Introduction

The Commission uses the term "competitively determined plan contribution" (CPC) to broadly describe a federal contribution toward coverage of the Medicare benefit based on the cost of competing options for the coverage, including those offered by private plans in addition to the traditional fee-for-service (FFS) program. (Throughout this chapter, "plans" refer to various types of private health plans as well as traditional FFS Medicare.) Specifically, CPC has two defining principles: First, beneficiaries receive a federal contribution to buy Medicare coverage, and the contribution amount is competitively determined; second, beneficiaries' individual premiums vary depending on their choice of coverage and the level of the federal contribution. CPC encompasses a set of concepts related to premium support or defined contributions. CPC and the related concepts represent a fundamental departure from current FFS Medicare, which pays for a defined benefit package and bears the risk of financing the benefit. Additionally, it differs from FFS Medicare because the federal contribution is based on competitive bidding rather than administratively set prices.

An argument for a CPC approach is that a market-based model in which private plans compete for enrollment might do better at keeping overall spending—and hence, premiums—down in certain markets than a model based on unrestricted FFS with open-ended provider participation and administered prices. A successful CPC model depends on strong competition among private plans offering lower premiums and more attractive benefits and on informed beneficiaries who respond to those offerings. Competing private plans, however, do not necessarily lower the cost to the Medicare program if the rules defining how they get paid do not encourage them to compete based on cost or premiums. For example, the current Medicare Advantage (MA) program produces a higher cost to Medicare than the traditional FFS program. Therefore, whether a CPC approach can lower overall Medicare spending depends on the specific design of the model and how different components of the model interact.

In its most basic form, a CPC approach consists of three main actors with different roles. The Medicare program designs the system and makes the rules that result in the CPC contribution amount and payments to plans. (The program also continues to administer the FFS benefit and set FFS payment rates.) Private plans, the second actor, use those rules to guide their business decisions, such as whether to enter or exit a particular market, how much to bid (which in turn is a factor in determining the level of the government contribution amount), and what benefit designs or products to offer. Beneficiaries, the third actor, then make their purchasing decision and choose a plan or FFS for their Medicare coverage based on the premiums and other attributes of offered plans. Their choice of coverage determines the premiums they pay. In this chapter, we discuss elements of CPC most relevant to decisions made by each of the three actors: design questions for the Medicare program, plan bids for private plans, and premiums associated with different options of Medicare coverage for beneficiaries.

Part D as an example of a CPC approach

CPC is not a new concept. In fact, Medicare Part D provides a working example of a CPC approach and illustrates the range of the detail and specificity of the rules that a CPC approach requires. Under Part D, prescription drug plans and MA plans bid to provide a drug benefit within 1 or more of 34 prescription drug regions. The law provides for a standard benefit, but, within limits, plans can offer benefit designs that are actuarially equivalent to the standard benefit. Plans can offer enhanced benefits if they also offer a plan with the standard benefit in the same region.

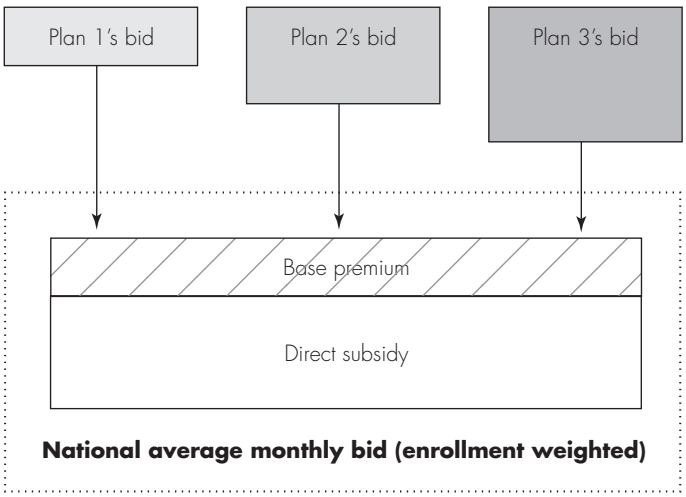
Figure 1-1 and Figure 1-2 illustrate how a CPC design works in Part D. As shown in Figure 1-1 (p. 6), the national average monthly bid is divided into two parts—base beneficiary premium and direct subsidy. (Throughout this chapter, we use "premiums" to refer to beneficiary premiums and "plan bids" to refer to plans' total costs in providing the benefit.) The base premium is what an enrollee pays to the plan each month, on average, and equals 25.5 percent of the average benefit cost. The direct subsidy is the federal contribution Medicare pays to plans each month for each of the plan's enrollees and equals 74.5 percent of the average benefit cost. Because the base premium and direct subsidy are set nationally, they do not vary across plans. A more detailed description of the Part D payment system can be found at http://www.medpac.gov/documents/MedPAC_Payment_Basics_12_PartD.pdf.

Under Part D, plan enrollees pay the base premium plus the difference between their plan's bid and the national average bid (Figure 1-2, p. 6). Therefore, although the base premium is the same for all beneficiaries, individual beneficiaries' premiums vary, depending on how their

EMBARGOED FOR RELEASE UNTIL 10AM JUNE 14, 2013

FIGURE 1–1

How CMS calculates national average monthly bid (enrollment weighted) under Part D



Note: Under Part D, the national average monthly bid is divided into two parts—base beneficiary premium and direct subsidy. The base premium is what an enrollee pays to the plan each month, on average, and equals 25.5 percent of the average benefit cost. The direct subsidy is the federal contribution Medicare pays to plans each month for each of the plan's enrollees and equals 74.5 percent of the average benefit cost.

plan's bid compares with the national average bid. If a plan's bid is equal to or less than the direct subsidy amount, a beneficiary will pay no premium to enroll. If a plan's bid is higher than the direct subsidy and base premium amounts combined, an enrollee will pay the base premium plus the additional cost above the national average.

One aspect of the CPC design for Part D ensures that beneficiaries eligible for the low-income subsidy (LIS) have premium-free plans available to them. CMS establishes a separate low-income threshold in each prescription drug region, calculated as the LIS enrollment-weighted average premium in the drug region with some modifications. Plans with bids up to this regional benchmark are premium-free for LIS beneficiaries. As a result, LIS beneficiaries have access to at least one premium-free stand-alone drug plan even in regions where the average bid is higher than the national average.

The Federal Employees Health Benefits (FEHB) Program also illustrates different applications of the CPC principles (see text box). Under FEHB, the federal government contributes 75 percent of health insurance premiums up to a maximum amount. Therefore, among plans subject to the maximum contribution amount, enrollees pay the full difference between the plan premium and the maximum contribution amount. Otherwise, enrollees pay a proportional 25 percent of plans' premiums.

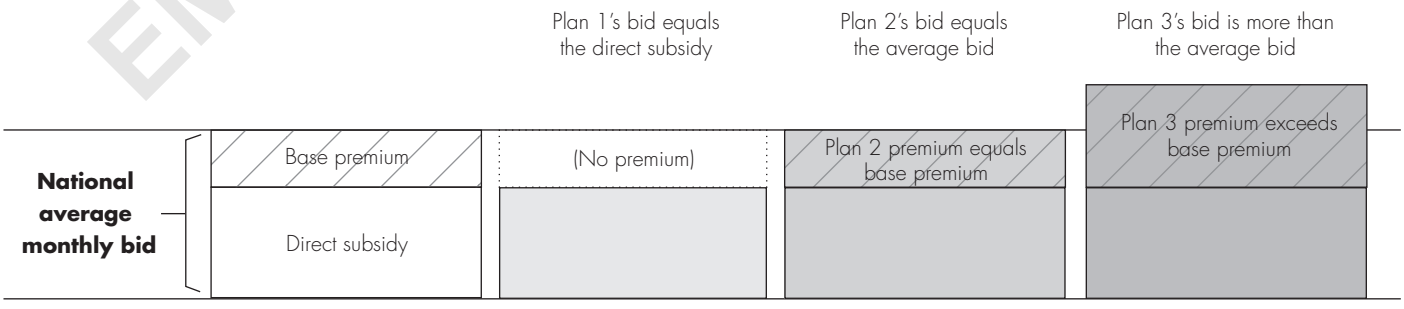
Design questions under the CPC approach

The above discussion of Part D highlights two defining principles of a CPC approach: Beneficiaries receive a federal contribution to buy Medicare coverage, and their individual premiums depend on their choice of coverage. However, there are different ways to apply the principles in designing

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

FIGURE 1–2

Plan sponsors' bids determine enrollee premiums under Part D



Note: Under Part D, the national average monthly bid is divided into two parts—base beneficiary premium and direct subsidy. The base premium is what an enrollee pays to the plan each month, on average, and equals 25.5 percent of the average benefit cost. The direct subsidy is the federal contribution Medicare pays to plans each month for each of the plan's enrollees and equals 74.5 percent of the average benefit cost. Under Part D, plan enrollees pay the base premium plus the difference between their plan's bid and the national average bid.

Federal Employees Health Benefits Program

The Federal Employees Health Benefits (FEHB) Program is the nation's largest employer-sponsored health insurance program. Eligible individuals include current employees, annuitants (retired employees entitled to an immediate pension), and their dependents. Active employees and retirees pay the same premium amounts. The FEHB Program is administered by the Office of Personnel Management (OPM), which has wide authority to implement regulations, contract with plans, and establish benefits. In 2013, there are about 230 different plan choices, typically up to 15 plans available in a given area.

Calculation of the federal government's contribution to health insurance premiums has certain characteristics of a CPC approach. Under the current rules, the government's share of premiums is set at 75 percent of a given plan's premium up to a maximum of 72 percent of the weighted average premium of all plans in the program. Employees who enroll in a more expensive plan pay the full amount by which the plan's premium exceeds the government's maximum contribution amount. For about 40 percent of plans in 2013, the government contribution toward biweekly premiums is a maximum of $190.84 for single coverage and $424.95 for family coverage. The government contribution is determined separately for single and family coverage but does not vary geographically. Unlike Medicare Part D, the FEHB Program does not have a standard benefit package. However, OPM specifies benefit parameters, including certain required benefits and changes in benefits, through the annual call letter for benefit and rate proposals from plans. Within those parameters, plan premiums that make up the weighted average premium can vary widely in their benefit packages and cost-sharing requirements, ranging from high-deductible plans to wide-network preferred provider organizations. ■

a CPC model, and those differences have important implications for beneficiaries and the Medicare program.

In this section, we focus on four basic design questions any CPC model in Medicare must address:

- Should the benefit package be standardized?
- Should a CPC model be based on competitive bidding?
- Should a CPC model include FFS Medicare?
- How should the federal contribution be determined?

There are no right or wrong answers to these questions, but there are different answers depending on the policy priorities of the program and the desired responses from plans and beneficiaries. Under a CPC approach, specific details of the design are critical because Medicare cannot dictate the decisions made by private plans and beneficiaries. Medicare must rely on the incentives it creates in the design, but there is no guarantee that it will achieve the desired behavioral responses from plans and beneficiaries.

The above four questions do not, by any means, make up a definitive or exhaustive list. There are additional design questions we do not consider in this section—such as, how does the federal contribution grow over time? Nonetheless, the list represents first-order questions that must be addressed in designing a CPC model. For simplicity, we limit our discussion to applying a CPC approach for services provided under Part A and Part B of Medicare.

Should the benefit package be standardized?

Under CPC, standardization can be interpreted in at least three ways. All plans could be required to cover the same defined set of services with specified cost sharing, cover the same defined set of services but vary cost sharing (like MA), or provide benefit packages that are actuarially equivalent to a set value (like Part D), with benefits and cost sharing being allowed to vary from plan to plan.

The purpose of standardization is to make plans compete largely on the basis of their price by requiring them to bid on a standardized package of benefits. Choosing health insurance is notoriously complicated because plans differ in multiple dimensions simultaneously. Even under the strictest interpretation of standardization, plans differ in important and meaningful ways, including provider networks, level of utilization management, customer service, and convenience. Nevertheless, if plans compete largely on the basis of price for a set product, beneficiaries can reduce the degree of complexity, compare plans on fewer dimensions, and simplify their decision making.

EMBARGOED FOR RELEASE UNTIL 4:00 PM JUNE 14, 2013

Lessons learned from previous demonstrations of competitive bidding for Part C

In previous demonstrations of competitive bidding for Part C, certain themes became evident:

- Stakeholders were united in opposing the demonstrations.
- Plans wanted to have benchmarks set in advance.
- Plans resisted being judged on the level of their premiums rather than on the benefits they offered.
- Plans objected to third-party marketing.
- Some thought Medicare fee-for-service (FFS) should be included as a plan for bidding purposes.

In 1996, the Health Care Financing Administration (HCFA, now CMS) began developing a demonstration of competitive pricing. Baltimore was selected as the site for the demonstration because of the large number of available plans, the small number of beneficiaries enrolled in the plans at the time, and the relatively high adjusted average per capita cost rates that allowed plans to offer a substantial level of enhanced benefits. The latter feature of the Baltimore market was important because the demonstration had to be budget neutral, and no additional Medicare dollars could be used to finance extra benefits that would attract enrollment.

The design of the bidding process called for plans to bid on a standard benefit package that HCFA specified. On receiving the bids, HCFA would determine the level of the government contribution, and plans with bids above that level would charge a premium. HCFA did not specify the level of the government contribution in advance but stated that it would not be set at the lowest bid for the standard benefit package. Marketing and enrollment would be through a third party, not through the health plans.

The demonstration ended before implementation because of unified opposition from stakeholders. The industry objected to certain design features, including not knowing the government contribution in advance, using member premiums as the basis for distinguishing among bidding plans in the market, and using a third party for marketing and enrollment. Dowd and colleagues state that "plans repeatedly asked HCFA to forgo the competitive bidding process and simply to announce an administrative price that achieved whatever cut in payment the agency sought. HCFA rejected this approach as just another variant of administrative pricing, which would not produce information on the efficient price of the standard benefit package" (Dowd et al. 2000).

HCFA then chose Denver as the demonstration site. The Denver market was similar to Baltimore in the number of plans, enrollees, and benefits offered. One design feature was changed: Plans that had to charge premiums when their bids exceeded the government contribution were allowed to waive all or some of the

(continued next page)

EMBARGOED FOR RELEASE UNTIL 12PM JUNE 14, 2016

Standardization also limits the opportunity for risk selection because plans cannot design benefit packages aimed at enrolling only the healthiest beneficiaries. For example, setting high coinsurance rates for expensive chemotherapy treatments is likely to deter cancer patients from enrolling or staying enrolled. (Conversely, standardization also limits beneficiaries' opportunity to choose their desired benefit designs based on their preferences and needs.[1]) However, standardizing the benefit packages could make it more difficult for plans to innovate and respond quickly to changes in medical practice.

The medigap market provides precedent for standardizing the benefit package. In 1990, policymakers reformed the medigap market by imposing standardized plans that vary in how they wrap around Medicare's cost sharing and benefits. Before 1990, beneficiaries shopping for Medicare supplemental policies faced an array of duplicative, confusing offerings. Reports of marketing abuses were frequent. Legislation restricted insurers to a limited menu of medigap options, identified by the letters A through J. For example, all C policies provide exactly the same benefits, and insurers selling those policies compete on the basis of price alone.

Under current law, MA plans are required to cover all Medicare Part A and Part B benefits except hospice. Plans may supplement Medicare benefits by reducing cost-sharing requirements, providing coverage of non-Medicare benefits, or providing a rebate for all or part

Lessons learned from previous demonstrations of competitive bidding for Part C (cont.)

premium if they also accepted a payment reduction equal to the waived amount. Plans opposed the Denver demonstration for the same reasons as in Baltimore, with the added concern that FFS Medicare was not being considered a bidding plan. As they did in Baltimore, plans also asked HCFA to set administered pricing rates if the goal was to reduce plan payments. Some of the Denver HMOs initiated a lawsuit that resulted in a temporary restraining order just as plan bids were being submitted, and opposition led to the end of the demonstration before full implementation.

From the Denver demonstration, HCFA learned the range of plan bids for the enriched standard benefit package (which included drug coverage) and the Medicare Part A and Part B benefit package. According to Dowd, "HCFA … made it known that the … bids they examined in Denver for the standard benefit package (the 'market norm' benefit package that included prescription drugs) were 5 percent to 17 percent below the published Balanced Budget Act (BBA) payment rates, which reflect the cost of entitlement benefits (that is, no drugs) in FFS Medicare. The … bids for the entitlement benefit package [Medicare Part A and Part B] were 25 percent to 38 percent below the BBA rates" (Dowd 2001).

The Balanced Budget Act of 1997 mandated competitive pricing demonstrations at various sites, with the design of the demonstrations to be determined by a national Competitive Pricing Advisory Committee (CPAC) with additional input from Area Advisory Committees (AACs). Under the CPAC design, FFS Medicare was excluded as a bidding plan because no statutory authority allowed its inclusion, but CPAC urged the Congress to consider including FFS. CPAC established a national standard enhanced benefit package that included drug coverage, but each AAC could further enhance the benefit if the local standard was to have a more generous benefit package in Medicare plans. CPAC specified that the government contribution should be at the median bid (adjusted for plan capacity) or at the enrollment-weighted average bid. At each of the two demonstration sites (Kansas City and Phoenix), the AAC chose the amount resulting in a higher government contribution. Plans bidding above the contribution level would charge a premium; plans bidding below that amount could retain the difference or provide extra benefits. CPAC also considered ways to have financial incentives to promote quality of care. In addition to decisions about the standard benefit package and the level of the government contribution, the AACs would determine whether plans would bid on a county-by-county basis (separate bids for each county) or on a "reference" county, with ratios established for payments in each county.

After a number of delays, the Kansas City and Phoenix demonstrations also ended before implementation because of mounting stakeholder opposition. ■

EMBARGOED FOR RELEASE UNTIL 12:01AM JUNE 14, 2013

of the Part B or Part D premium. An MA plan's bid reflects its costs to provide the Part A and Part B benefit package for a beneficiary of average health status, and the plan's payment from Medicare depends on how its bid compares with the local MA benchmark. The cost-sharing component of the bid for the standard benefits must be actuarially equivalent to FFS cost sharing in total.[2] For the Part A and Part B benefit package, beneficiaries will pay the Part B premium and any additional premium if they choose a plan with a higher bid. A lower bid may result in savings for the beneficiary, including lower cost sharing or a reduced Part B premium. A more detailed description of the MA program can be found at http://www.medpac.gov/documents/MedPAC_Payment_Basics_12_MA.pdf.

When Part D plans offer a standard benefit, plans can vary their benefit packages within limits as long as they are actuarially equivalent to the defined standard benefit. (Part D plans can also offer enhanced benefits as long as they offer a standard benefit.) Few beneficiaries are in plans with a standard benefit design—that is, almost all Part D plans offer plans different from the standard benefit. However, plans must meet certain requirements that limit variation. For example, all plans have the same limit on out-of-pocket spending. They must cover at least two drugs in each therapeutic category and class unless only one drug is available. Moreover, they must cover all or substantially all drugs in certain protected classes such as cancer drugs and antidepressants. Furthermore, CMS is

Relationship between fee-for-service Medicare and Medicare Advantage plan bids

To understand the effect of fee-for-service (FFS) Medicare and private-sector payment rates on Medicare Advantage (MA) plan bids, we analyzed the relationship between the MA plan bid as a share of FFS spending in 2008, for HMO and preferred provider organization (PPO) plans separately, as well as the following five variables:

- ***an index of payment rates for hospital services in the non-Medicare market (adjusted for the Medicare hospital wage index)***—Hospital services represent roughly 30 percent of Medicare spending; therefore, if MA plans paid non-Medicare market prices, we would expect a 1 percent increase in hospital prices to increase MA plan bids by 0.30, all else equal;
- ***an index of payment rates for physician services in the non-Medicare market (adjusted for the Medicare physician fee schedule index)***—Physician fee schedule services represent roughly 12 percent of Medicare spending, so we would expect a 1 percent increase in physician prices to increase MA bids by 0.12 percent, all else equal;
- ***the MA benchmark, the maximum program payment for Part A and Part B services***—In areas with higher benchmarks, plan bids relative to FFS spending may be higher because plans feel less pressure to control their costs, spend more on broader networks and marketing, and use less utilization review;
- ***an index of FFS Medicare service use per beneficiary***—In areas with higher service use, plans may have more opportunities to reduce spending on discretionary services and fraud and abuse in certain markets; and
- ***a measure of insurer market power using the Herfindahl index derived from American Medical Association data on insurer market shares***.

The results of the above model are shown in Table 1-1.

Overall, MA plan bids have little relationship to private-sector payment rates. The hospital price variable has no effect in the HMO model and has a small effect of roughly 0.04 in the PPO model, which is much smaller than the value of 0.30 that would be predicted if MA prices followed non-Medicare private insurer prices. This fact suggests that MA plan hospital prices are not tied to prices in the non-Medicare market, which is consistent with what we have heard from plans and other market participants. Non-Medicare physician payment rates also appear to have at most a modest relationship to MA bids, suggesting that physician payment rates may be partly anchored to FFS prices. There is more uncertainty regarding the prices MA plans pay physicians given the inconsistency of the regression results and less corroborating data than we have in the case of hospitals. It is possible that physician payment is less consistently anchored to FFS payment rates than hospital prices.

The coefficient in the third row of Table 1-1 (–0.49) tells us that in markets where FFS beneficiaries' service use is 1 percent higher than average, MA bids are expected to be roughly 0.49 percent lower than the FFS costs on average, all else equal. Conversely, in markets where FFS beneficiaries' service use is 1 percent below average, MA bids are expected to be roughly 0.49 percent higher than FFS costs, all else equal. Some caution should be taken in interpreting this variable in that the model forces linearity on the service-use variable, and the exact coefficient can change with the functional form of the model. However, across

(continued next page)

required to monitor plan submissions to ensure that benefit designs are not constructed to discriminate against certain beneficiaries. (This is also true in MA.)

If benefits were standardized in a CPC model for Part A and Part B of Medicare, policymakers would have to determine the composition of the standard benefit. Whether defined as the current-law benefit or changed to a different benefit design, decisions about how the benefit package should be standardized will be necessary in designing a CPC model.

EMBARGOED FOR RELEASE UNTIL 10PM JUNE 14, 2013

Relationship between fee-for-service Medicare and Medicare Advantage plan bids (cont.)

TABLE 1–1

Non-Medicare prices have little effect on MA HMO and PPO bids

Categories and variables (enrollment-weighted MSA-level mean values)	Expected coefficient if prices equal non-Medicare market prices	Regression results		
		Coefficient	Standard error	*P* value
Dependent variable:				
HMO bid for Part A and Part B services relative to FFS cost				
Hospital price index (non-Medicare 2008)	0.30	–0.00	0.02	0.8160
Physician price index (non-Medicare 2008)	0.12	0.06	0.03	0.0697
Index of FFS Medicare service use (MSA 2006–2008)	< 0	–0.49	0.05	<0.0001
Benchmark-to-FFS ratio (based on 2008 data)	> 0	0.26	0.07	0.0001
Insurer market power (HHI/10,000 in 2008)	Unclear	–0.01	0.03	0.8027
R^2 = 0.52				
N=199				
Mean weighted HMO bid in the 199 areas = 99% of FFS				
Median weighted HMO bid in the areas = 100% of FFS				
Dependent variable:				
PPO bid for Part A and Part B services relative to FFS cost				
Hospital price index (non-Medicare 2008)	0.30	0.04	0.02	0.0053
Physician price index (non-Medicare 2008)	0.12	–0.02	0.02	0.3905
Index of FFS Medicare service use (MSA 2006–2008)	< 0	–0.24	0.04	0.0005
Benchmark-to-FFS ratio (based on 2008 data)	> 0	0.26	0.05	<0.0001
Insurer market power (HHI/10,000 in 2008)	Unclear	–0.05	0.02	0.0092
R^2 = 0.47				
N=181				
Mean weighted PPO bid in the 181 areas = 105% of FFS				
Median weighted PPO bid in the areas = 105% of FFS				

Note: MA IMedicare Advantage), PPO (preferred provider organization), MSA (metropolitan statistical area), FFS (fee-for-service), HHI (Herfindahl index of competition in the core-based statistical area). The HHI variable is normalized to a 0 to 1 scale where a monopoly market has an HHI of 1. Variables are expressed in log form, so the coefficients represent the effect of a 1% increase in non-Medicare prices or a 1% increase in the benchmark above FFS payments on the HMO or PPO bids. Our analysis is based on MA plan bid data for the 2010 contract year, submitted by plans in June of 2009. The MA bids submitted in June 2009 presumably would be based on the claims history from 2008 and earlier years. The 2008 claims history underlying the 2010 bids matches the time frame of our earlier analysis on private payment rates, which was based on the actual private-sector claims from calendar year 2008. For our enrollment weighting of the MA bid data by geographic area, we use the November 2010 county-level actual enrollment files from CMS, rather than plans' projections of enrollment by county. For service use, we use historical FFS levels from 2006 to 2008. *P* value refers to the statistical significance of the coefficient; it is the probability that the coefficient could be different from zero purely due to random variation. Expected effect of insurer market power is unclear given that insurer power may lead to lower prices for nonphysician and nonhospital services, which are not controlled for in the regression, but it could also lead to more insurer profit or less efficiency, which could increase bids.

Source: MedPAC analysis of Medicare Advantage bid data.

different functional forms, we consistently find that high-service-use markets tend to have bids below FFS, and low-service-use markets tend to have bids above FFS after controlling other factors such as the effect of Medicare policy on benchmarks. For example, the Oklahoma City metropolitan statistical area is a high-service-use area. Its FFS service use is 16 percent above the national average; therefore, we would expect

(continued next page)

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Should a CPC model be based on competitive bidding?

In theory, the cost of Medicare coverage and the federal contribution under a CPC approach could be based either on the bids of competing plans or on an administratively set amount independent of plan bids. As discussed earlier, Part D is based on a competitive bidding system. In contrast, the cost of Medicare coverage under MA is administratively set at predetermined benchmarks based

Relationship between fee-for-service Medicare and Medicare Advantage plan bids (cont.)

the MA HMO bids to be about 8 percent lower (16% × –0.49) than FFS costs in this market on average, all else equal. In contrast, in an area with very low spending like Fargo, ND, where FFS service use is 12 percent below average, we would expect MA HMO bids to be roughly 6 percent higher (–12% × –0.49) than FFS costs, all else equal. Bids will also be affected by other factors (including individual HMO efficiency), but these two examples provide some intuition about the magnitude of the model's findings on the average effect of variation in service use on the competitiveness of HMO bids relative to FFS costs.

Two possible factors drive these results. First, MA HMOs will have an easier time reducing service use below FFS service use in markets where there are higher volumes of unnecessary services and fraudulent FFS claims. In markets where service use is low, there may be few opportunities to reduce service use further. Second, MA HMOs tend to have higher overhead (some of which may be used to coordinate care or control service use); in areas with low service use, this fixed overhead is a larger share of total costs, making it more difficult to compete with FFS on price. The overarching idea is that MA HMOs will be more competitive relative to FFS Medicare in markets with high service use.

In the PPO regression, our results suggest that PPO bids are 0.24 percent lower than average markets where FFS use is 1 percent above average, and PPO bids are 0.24 percent higher than the average bid in markets where FFS service use is 1 percent below average. This suggests that PPO plans can control use in some markets but tend to have less of an effect on service use than HMOs. This result is consistent with the average bid data, which show PPO bids being roughly 5 percent higher than MA HMO bids.

The fourth row of Table 1-1 shows that for every 1 percent increase in the benchmark above FFS costs, HMO and PPO bids increase by 0.26 percent.[3] This result indicates that MA plan bids can be influenced by Medicare policy that changes payment rates to the MA plans. The last row of Table 1-1 shows that insurer market power has little effect on HMO bids, but it may have a slightly negative effect on PPO bids, possibly due to greater economies of scale with respect to administrative costs such as developing a network of providers. ■

EMBARGOED FOR RELEASE UNTIL 10PM JUNE 14, 2013

on—although not always equal to—past Medicare FFS spending projected to the current year.

The main argument for basing a CPC model on competitive bidding is that a competitive market would provide price information, and getting bids on a set benefit package (such as the Medicare Part A and Part B benefit) is as close as we can come to a competitive market. In theory, allowing those entities with the best, most up-to-date information on the cost of providing a set benefit to determine the market price would result in more accurate pricing that can readily incorporate market changes. In practice, however, past attempts at competitive bidding in Medicare Part C suggest that plans might not welcome such a process. Previous demonstrations from the 1990s ended before implementation because of unified opposition from stakeholders, including the private plans that would have been participants (see text box, pp. 8–9).

Whether a CPC model is based on, or independent of, plan bids may have significant effects on Medicare spending. If the federal contribution were based on plan bids each year, changes in the underlying costs of providing the Medicare benefit would be incorporated into those bids, and the Medicare program would bear most of the risk in year-to-year fluctuations in costs. On the other hand, if the federal contribution were set at a predetermined amount (e.g., average FFS spending per beneficiary in the base year) and indexed to grow at a predetermined rate (e.g., the rate of gross domestic product), program spending would be predictable. However, beneficiaries would bear the risk of unexpected increases in costs for Medicare coverage if the increase in the federal contribution is insufficient for plans to cover their costs. If beneficiaries could not or would not pay all of the resulting increase in premiums, plans would have to find ways of lowering their premiums to maintain enrollment.

Should a CPC model include FFS Medicare?

FFS Medicare can be a part of a CPC model in two ways. More narrowly, FFS Medicare can be one of the plan bids in calculating the federal contribution under CPC. There are several reasons for FFS Medicare to remain as a plan option. First, in some areas FFS Medicare might be the low-cost option of Medicare coverage compared with options offered by private plans. In those areas, not including FFS Medicare would result in higher spending by the program, the beneficiary, or both, depending on the level of the federal contribution.[4] Moreover, the existence of FFS Medicare in those areas may put downward pressure on plan bids that need to compete with low FFS spending. Second, FFS Medicare guarantees at least one option of Medicare coverage in all areas because private plans might not be available everywhere, such as in some rural areas. Third, some beneficiaries might prefer FFS Medicare for its wider network of providers and would pay higher premiums for that choice if FFS Medicare were not the low-cost option.

More broadly, FFS Medicare can coexist along with private plans in a CPC model even if it is not included in the calculation of the federal contribution. Maintaining FFS Medicare could be important beyond its role as an option for Medicare coverage. Because FFS Medicare could indirectly affect the payment rates that private plans pay providers, the existence of FFS Medicare could ultimately affect plan bids in a CPC model. Currently, FFS Medicare payment rates overall are about 20 percent lower for physician services and over 30 percent lower for hospital services compared with payment rates in the private sector (American Hospital Association 2012, Medicare Payment Advisory Commission 2013). Under a CPC model without FFS Medicare, dramatically higher payment rates for Medicare services could result in higher plan bids if private plans pay the rates that currently prevail in the private sector.

An analysis of the relationship between plan bids under the current MA program and FFS Medicare shows that MA plan bids are more strongly correlated with FFS Medicare than with payment rates in the private sector (see text box, pp. 10–12). In addition, conversations with hospital executives and actuaries suggest that MA payment rates for hospital services are closely anchored to FFS Medicare payment rates in contract negotiations. Consequently, if FFS Medicare payment rates are reference prices in negotiations between providers and plans, maintaining FFS Medicare may have a noticeable impact on plan bids in a CPC model.

There are a couple of reasons why private plans could pay providers less in the MA market compared with the private sector. Under current law, providers must accept the MA plan's payment for certain services (such as emergency services and other covered services from providers that are not under a contract with the MA plan) as payment in full as long as it is at least the amount that would have been paid in FFS Medicare plus any allowed cost sharing. For those services, therefore, FFS payment rates directly affect MA payment rates. In addition, MA plans compete with FFS Medicare for beneficiaries. In other words, providers are paid either at the FFS payment rate or at the payment rate negotiated with the MA plan for Medicare services. As mentioned previously, this fact could play a role in contract negotiations between MA plans and providers. For example, a hospital may decide that payments from MA plans are preferable to FFS Medicare if the MA payment rates are just slightly higher than FFS payment rates or if they are equal to FFS Medicare but with additional volume of patients from being an in-network provider. In this case, FFS payment rates indirectly affect MA payment rates.

How should the federal contribution be determined?

Under a CPC model, beneficiary premiums would depend on how plan bids compare with the federal contribution amount. If plan bids are higher than the federal contribution amount, beneficiaries will pay the difference in a premium, whereas if plan bids are lower, beneficiaries will receive the difference in a premium rebate. (For simplicity, one can think of the difference between the federal contribution and a lower plan bid as a cash rebate.) Therefore, the rules used to calculate the federal contribution have very important implications for beneficiaries' premiums and program spending.

In particular, we focus on the level at which the federal contribution is determined. It is a key design question regardless of the exact formula of the contribution. Whether the federal contribution is calculated nationally, as in Part D, or is allowed to vary across geographic regions and plans, as in Part C, has significant distributional effects.

Consider the following illustrative example. Suppose the national average cost of providing Medicare Part A and Part B services is $800 per month. Further, suppose there are three areas with equal numbers of beneficiaries but different levels of average Medicare cost per month: $680, $800, and $920 (i.e., the second column in Table 1-2, p. 14).

EMBARGOED FOR RELEASE
UNTIL 1:30PM
JUNE 14, 2013

TABLE 1–2 **Illustrative example: Federal contribution is set nationally**

	Average monthly cost for Part A and Part B benefit	Federal contribution: 87.5% of national cost	Beneficiary premium: Monthly cost – federal contribution
Area 1	$680	$700	–$20
Area 2	800	700	100
Area 3	920	700	220

Note: In this illustrative example, we assumed the following: The national average cost of providing Medicare Part A and Part B services is $800 per month; there are three areas with equal numbers of beneficiaries but different levels of average Medicare cost per month—$680, $800, and $920 (i.e., the second column); and the federal contribution amount is set at 87.5 percent of the national average cost of the Medicare benefit, or $700 per month in all three areas (i.e., the third column). As a result, beneficiary premiums in the three areas are –$20 (premium rebate), $100, and $220 (the fourth column in the table—i.e., the second column minus the third column).

One can think of the level of Medicare cost as the area's representative plan bid for providing the Part A and Part B benefit or the area's FFS spending. The purpose of this example is to illustrate how different rules for calculating the federal contribution affect beneficiary premiums when Medicare costs vary across areas.

Specifically, consider the following three rules for calculating the federal contribution amount:

1. 87.5 percent of the national average cost of the Medicare benefit,
2. 87.5 percent of the local average cost of the Medicare benefit, or
3. the residual after the beneficiary pays 12.5 percent of the national average cost of the Medicare benefit.

Under current law, the standard Part B premium represents roughly 12.5 percent of total Medicare spending and the program's share is roughly 87.5 percent.

Under the first rule, or the "national" option, beneficiaries in all three areas receive $700 per month as the federal contribution for their Medicare benefit (i.e., the third column in Table 1-2). Therefore, beneficiary premiums in the three areas are –$20 (premium rebate), $100 (average premium), and $220 (the fourth column in Table 1-2—i.e., the second column minus the third column).

In contrast, under the second rule, or the "local" option, beneficiaries in the three areas receive different contribution amounts because the federal contribution is tied to the area-specific cost of the Medicare benefit (i.e., the second column in Table 1-3). For example, in area 1, the federal contribution is lower, at $595 (87.5 percent of $680) compared with $805 (87.5 percent of $920) in area 3. As a result, the beneficiary premium is $85 in area 1 compared with $115 in area 3 (the fourth column in Table 1-3).

Finally, under the third rule, beneficiaries in all areas pay 12.5 percent of the national average cost, or $100 in premiums (the fourth column in Table 1-4). It represents the inverse of the first rule in that it sets the beneficiary premium nationally. Whereas the federal contribution does not vary across areas in Table 1-2, the beneficiary

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

TABLE 1–3 **Illustrative example: Federal contribution is set locally**

	Average monthly cost for Part A and Part B benefit	Federal contribution: 87.5% of local cost	Beneficiary premium: Monthly cost – federal contribution
Area 1	$680	$595	$85
Area 2	800	700	100
Area 3	920	805	115

Note: In this illustrative example, we assumed the following: The national average cost of providing Medicare Part A and Part B services is $800 per month; there are three areas with equal numbers of beneficiaries but different levels of average Medicare cost per month—$680, $800, and $920 (i.e., the second column); and the federal contribution amount is set at 87.5 percent of the local average cost of the Medicare benefit (i.e., the third column). As a result, beneficiary premiums in the three areas are $85, $100, and $115 (the fourth column in the table—i.e., the second column minus the third column)

TABLE 1–4 **Illustrative example: Federal contribution and beneficiary premiums under current law**

	Average monthly cost for Part A and Part B benefit	Federal contribution: Monthly cost – beneficiary premium	Beneficiary premium: 12.5% of national cost
Area 1	$680	$580	$100
Area 2	800	700	100
Area 3	920	820	100

Note: In this illustrative example, we assumed the following: The national average cost of providing Medicare Part A and Part B services is $800 per month; there are three areas with equal numbers of beneficiaries but different levels of average Medicare cost per month—$680, $800, and $920 (i.e., the second column); and the federal contribution amount is set at the residual after the beneficiary pays 12.5 percent of the national average cost of the Medicare benefit (i.e., the third column). In other words, beneficiaries in all areas pay 12.5 percent of the national average cost, or $100 in premiums (i.e., the fourth column).

premium does not vary across areas in Table 1-4. In fact, this rule describes how the standard Part B premium is calculated under current law, which equals 25 percent of national average Part B spending.

Differences among the three rules for calculating the federal contribution illustrate how the difference in the average monthly cost of the Medicare benefit across areas is shared between the program and the beneficiary. In Table 1-2, the beneficiary pays the entire difference, whereas in Table 1-4, the program pays the entire difference. In Table 1-3, the program and the beneficiary divide the difference proportionately based on the 87.5/12.5 percent split.

There are additional issues related to the federal contribution amount. For example, if the contribution is based on competitive bids, a decision must be made on whether it should be based on the lowest bid, an average bid, or some other formulation. Setting benchmarks at the lowest local bids would minimize Medicare spending, but beneficiaries would have to pay additional premiums to join all but the lowest cost plan. However, there are also capacity concerns: The lowest bidder may not be able to enroll all beneficiaries who wish to join the low-cost plan. Alternatively, setting benchmarks high enough so that multiple plans in a local area can meet the benchmark should facilitate access to relatively low-premium plans in a market area but will be more costly to Medicare. In general, the formula for calculating the federal contribution will affect both beneficiary and plan behavior. Different formulas will redefine the set of lower cost options for beneficiaries and, as a result, change their choice for Medicare coverage. Similarly, different formulas for calculating the federal contribution will alter private plans' decisions about where and how to compete.

Analysis of plan bids and availability

In response to the specific design of the CPC model, private plans will need to make their business decisions—whether to enter or exit a particular market, how much to bid, and what benefit designs or products to offer. In this section, we focus on one such decision and simulate plan availability and beneficiary premium impacts under a CPC model using MA plan bids for 2013 as a proxy. Although the current MA program is not a competitive system, in that benchmarks for calculating payments to MA plans are not based on their bids, MA bids represent a measure of the total cost of providing the Medicare benefit by private plans and can inform how plans might act in a CPC model.[5]

Adjusting MA plan bids for payment areas

In our analysis, we adopt the definition of payment areas that is larger than the county definition currently used in the MA program. Using counties as payment areas results in many areas with a small number of FFS beneficiaries, and there can be instances of adjacent counties with very different levels of FFS spending. However, if payment areas are too large, the cost of serving beneficiaries can vary widely within payment areas.

To mitigate these problems and define an appropriate payment area that best matches the insurance markets served by private plans, the Commission recommended combining counties into larger payment areas for MA as follows (Medicare Payment Advisory Commission 2005):

- Among counties in metropolitan statistical areas (MSAs), payment areas should be collections of counties located in the same state and the same MSA.[6]

EMBARGOED FOR RELEASE UNTIL 11:00AM JUNE 14, 2013

TABLE 1–5 **Distribution of payment areas by average monthly FFS spending per beneficiary, 2013**

Average monthly FFS spending per beneficiary	Number of payment areas	Share of beneficiaries (in percent)	Top 5 payment areas by number of beneficiaries
$540–$645	102	5%	Buffalo; Rochester (NY); Honolulu; Albany (NY); Albuquerque
$645–$690	193	10	Sacramento; Portland (OR); Virginia Beach; Greensboro; Portland (ME)
$690–$750	396	23	Seattle; St. Louis; VA suburbs of Washington, DC; Milwaukee; Charlotte
$750–$825	337	30	Philadelphia; Atlanta; Riverside–San Bernardino (CA); Pittsburgh; Detroit
$825–$900	145	22	Chicago; New York; Boston; Phoenix; Tampa
$900–$1,335	56	9	Los Angeles; Houston; Dallas; Baltimore; Miami
Overall average ($781)	1,229	100	

Note: FFS (fee-for-service). Percentages do not sum to 100 due to rounding.

Source: MedPAC analysis of Medicare Advantage plan bids for 2013.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

- Among counties outside MSAs, payment areas should be collections of counties in the same state that are accurate reflections of health care market areas, such as health service areas.[7]

The purpose of our analysis is to simulate plan availability and beneficiary premium impacts under a CPC model, based on current MA bids. We did not model CPC plan bids, nor did we model changes in beneficiary choice among plans. That is, we did not model behavioral responses to the CPC incentives by plans or beneficiaries.

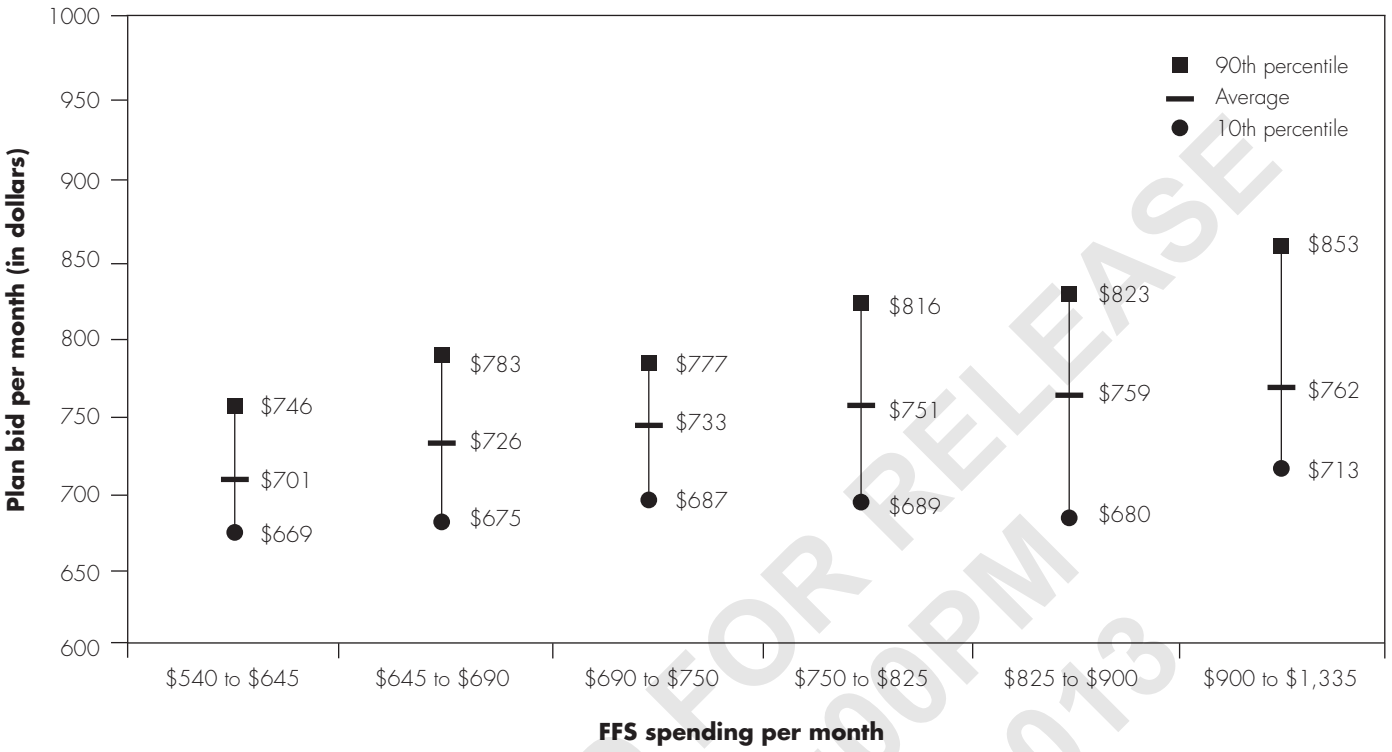
Specifically, we made the following assumptions in our analysis:

- We assumed that plan bids were constant over the entire plan-defined service areas, where service areas can be larger or smaller than payment areas.
- We assumed that if a plan is currently offered to at least half of all the Medicare beneficiaries in a payment area (as defined in the Commission's recommendation), the plan would serve the entire payment area with its current bid. If the plan is not offered to at least half of the beneficiaries, we assumed that it would not bid to serve that payment area.
- We excluded plans that were not open to all beneficiaries in a service area, such as employer-sponsored plans and special needs plans.
- We excluded bids from MA-only plans that do not offer Part D drug coverage since there may be positive risk selection in those plans, and those plans all have companion MA–Prescription Drug plans that do include Part D coverage.
- We excluded bids for plans in specific payment areas with little or no projected enrollment because those bids would not reflect costs for those specific areas.

The sample of data used in our analysis included 1,229 payment areas in the 50 states and the District of Columbia, with an average of 4.5 bids per payment area (Table 1-5).[8]

Table 1-5 shows the distribution of payment areas by average monthly FFS spending per beneficiary for 2013, ranging from $540 to $1,335. More than half of Medicare beneficiaries live in areas with FFS spending between

FIGURE 1–3 **Distribution of MA plan bids by average FFS spending in payment area, 2013**



Note: MA (Medicare Advantage), FFS (fee-for-service).

Source: MedPAC analysis of Medicare Advantage plan bids for 2013.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

$690 and $825 a month. (The overall average monthly FFS spending is $781.) In lower spending areas, 15 percent of beneficiaries live in areas with FFS spending below $690 a month; in higher spending areas, 31 percent of beneficiaries live in areas with FFS spending above $825.

Overall, MA plan bids in payment areas increase with the average FFS spending per beneficiary (Figure 1-3). However, within each payment area, there is a noticeable range in plan bids. For example, in one high-spending payment area with average FFS spending equal to $1,335, there were 37 total bids, ranging from just under $500 to just under $1,100. The average bid for that area was about $800. Similarly, in a low-spending area with average FFS spending equal to $650, the average bid from 24 total bids, ranging from just under $700 to about $850, was $750.

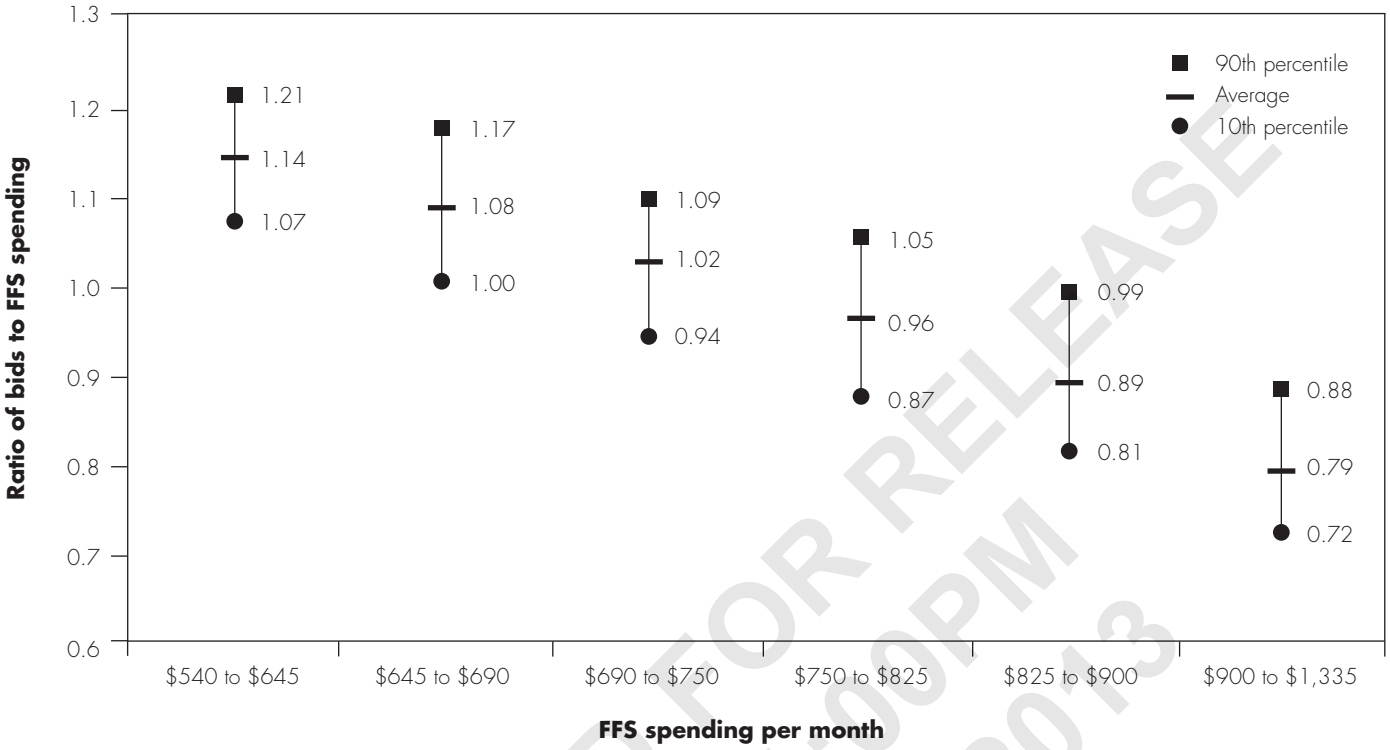
Although plan bids tend to increase as FFS spending increases, the ratio of plan bids to FFS spending in their payment area decreases as FFS spending increases (Figure 1-4, p. 18). For areas with FFS spending below $750 per month, the average bid to provide the Part A and Part B benefit is greater than FFS spending (the ratio is greater than 1.00). For example, in areas with average per capita FFS spending less than $645 per month, the average bid was 1.14 times FFS spending. In areas with FFS spending between $645 and $690 a month, the average bid was 1.08 times FFS spending. In higher spending areas, those with FFS spending at or above $750, average bids were lower than FFS spending. For example, in areas with FFS spending between $750 and $825, the average bid was 96 percent of FFS spending. Still, there were bids above FFS spending in those areas, as noted by the ratio of 1.05 at the 90th percentile of bids.

Illustrative options for calculating the federal contribution using MA plan bids

We considered three illustrative options for calculating the federal contribution. We used MA bids for 2013 as plan bids. In all three options, the federal contribution is set locally at the payment area level and the base premium is set nationally to the standard Part B premium under

FIGURE 1–4

Distribution of plan bids relative to FFS, by average FFS spending in payment area, 2013



Note: FFS (fee-for-service).

Source: MedPAC analysis of Medicare Advantage plan bids for 2013.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

current law, following the general approach described in Table 1-4. We compare the federal contribution amounts and changes in beneficiary premiums compared with current law under each of the three options.

Under the first option, the federal contribution equals the average FFS spending in the local payment area. Local FFS spending ranges from $540 to $1,335, averaging $781 per month. The overall average contribution amount under this option is $781, or the overall average FFS spending (Table 1-6).

Under the second option, the federal contribution equals the weighted average of plan bids and FFS spending in the local payment area. (In other words, FFS Medicare is considered one of the plan bids.) The overall average contribution amount under this option is $769, or 98 percent of average FFS. In low-spending areas, where plan bids are generally higher than FFS spending, this option would raise the contribution amount above FFS spending. By contrast, in high-spending areas, where plan bids are lower than FFS spending, this option would lower the contribution amount below FFS spending.

Under the third option, the federal contribution equals the lesser of the average private plan bids (FFS Medicare is not included as a plan bid) and FFS spending in the local payment area. In low-spending areas where plan bids are higher than FFS spending, this option would limit the contribution amount at FFS spending, whereas in high-spending areas, this option would set the contribution amount at the average plan bid and below FFS spending. The overall average contribution amount under this option is $726, or 93 percent of FFS.

Table 1-6 also shows that under the first and third options, in which the federal contribution is limited at the high end to local FFS spending, 85 percent of Medicare beneficiaries live in areas with at least one private plan whose bid is at or below the contribution amount. Under

TABLE 1–6

Range of federal contributions under three illustrative options, 2013

Illustrative scenario for determining federal contribution	Federal contribution (in dollars per month)			Federal contribution relative to FFS			At least one private plan at federal contribution amount (percent of beneficiaries)
	Minimum	Average	Maximum	Minimum	Average	Maximum	
100% local FFS	$540	$781	$1,335	1.00	1.00	1.00	85%
Average of bids and FFS	589	769	1,131	0.79	0.98	1.11	89
Lesser of average bid and local FFS	540	726	1,110	0.61	0.93	1.00	85

Note: FFS (fee-for-service). Our analysis assumes no behavioral responses from plans and beneficiaries. Federal contribution excludes quality bonus payments to plans.

Source: MedPAC analysis of Medicare Advantage plan bids for 2013.

the option in which the federal contribution is set at the average of FFS spending and the plan bids, 89 percent of beneficiaries live in areas where at least one private plan bid is at or below the contribution amount.

The federal contribution calculated under each illustrative option has different implications for beneficiaries depending on their choice of Medicare coverage and area. For this analysis, we assumed that any change in the federal contribution would be fully offset by a change in the plan premiums paid by beneficiaries. The numbers in Table 1-7 reflect only the changes in the federal contribution; we assumed no changes in plan offerings, no beneficiary response to the contribution changes, and that all beneficiaries continue to pay their Part B premium. It is very likely that beneficiaries would move to less expensive plans if they were available. The results here, however, also assume that beneficiaries stay in whatever private plan or FFS Medicare they were in before the federal contribution was changed.

Under the first option, in which the federal contribution equals the average FFS spending in the local payment area, no FFS beneficiaries would pay additional premiums for the Medicare Part A and Part B benefit (Table 1-7). However, beneficiaries enrolled in private plans may pay additional premiums depending on how the specific plan bid compares with the contribution amount, which equals FFS spending under this option. Because relatively more beneficiaries live in areas where the average plan bid is below FFS spending, the median premium difference is –$38 per month, assuming that current MA beneficiaries enroll in the same plan. This means that half of private plan enrollees would receive a rebate of $38 or more per

TABLE 1–7

Premium differences assuming beneficiaries remain in FFS or current MA plan, 2013

Illustrative scenario for determining federal contribution	Average federal contribution relative to FFS	Premium difference per month assuming beneficiaries remain in FFS or current plan					
		Current FFS beneficiaries			Current plan enrollees		
		10th percentile	Median	90th percentile	10th percentile	Median	90th percentile
100% local FFS	1.00	$0	$0	$0	–$202	–$38	$82
Average of bids and FFS	0.98	–14	3	49	–138	–26	66
Lesser of average bid and local FFS	0.93	0	17	149	–51	13	98

Note: FFS (fee-for-service), MA (Medicare Advantage). Payments to plans for their Medicare Part A and Part B cost equals the federal contribution plus a beneficiary premium. Under these scenarios where we assume plan bids do not change and beneficiaries remain enrolled in their original plans or Medicare FFS, a change in the federal contribution would produce an equal and opposite change in the beneficiary premium. This table illustrates the premium changes from current law that would result from calculating the federal contributions under these scenarios. Our analysis assumes no behavioral responses from plans and beneficiaries. Federal contribution excludes quality bonus payments to plans. All beneficiaries are assumed to continue to pay their Part B premium.

Source: MedPAC analysis of Medicare Advantage plan bids for 2013.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

month. In general, if the federal contribution is set at the local FFS spending, enrolling in a private plan would be a lower cost option for beneficiaries, on average, assuming the current level of bids from private plans. However, this relationship would vary across the country. Ten percent of plan enrollees would see premium rebates of at least $202 a month, while 10 percent of plan enrollees would see premium increases of at least $82 month, assuming none switched plans.

Under the second option, the overall federal contribution is slightly lower, at $769 per month compared with $781 under the first option. As a result, 10 percent of current FFS beneficiaries would receive premium rebates of at least $14 a month, and 10 percent would pay premium increases of $49 per month or more. Ten percent of current plan enrollees would receive premium rebates of at least $138 a month, and 10 percent of enrollees would see additional premiums of at least $66 a month if they chose to remain in their current plan.

Under the third option, in which the overall federal contribution is $726 a month, most FFS beneficiaries and plan enrollees would pay additional premiums—$17 or more per month for half of FFS beneficiaries and $13 or more per month for half of plan enrollees. Finally, 10 percent of current plan enrollees would see their premiums decrease by at least $51 a month, and 10 percent of plan enrollees would see their premiums increase by at least $98 a month if they did not switch plans.

Issues related to low-income beneficiaries

Currently, low-income beneficiaries receive financial assistance in paying for their Medicare premiums and cost sharing for Medicare-covered services. Most beneficiaries with incomes no greater than 100 percent of the federal poverty level and with assets no greater than $2,000 for individuals ($3,000 for couples) are also entitled to full Medicaid benefits in their state.[9] Under the current system, federal and state governments share the cost of subsidizing financial assistance for Medicare–Medicaid dually eligible beneficiaries.[10] It is likely that current rules governing such additional subsidies and benefits for low-income beneficiaries will need to be modified under a CPC approach. We discuss two specific issues.

The current standard Part B premium, which Medicaid programs pay on behalf of certain low-income individuals, is a uniform national amount. If some CPC designs result in a Part B premium that would vary across geographic areas, federal and state expenditures for dually eligible beneficiaries and other low-income beneficiaries could change significantly, raising expenditures in some areas and lowering them in other areas. Total expenditures in a given state may be very different from current expenditure levels.

Another issue—the treatment of Medicare cost sharing—arises in MA today and has a potential effect under CPC. For dually eligible beneficiaries receiving assistance with Medicare cost sharing, providers receive Medicare's standard program payment for the service, but payment of cost-sharing amounts (such as Medicare's 20 percent coinsurance for physician services) is the responsibility of the Medicaid program. This is true currently under both MA and FFS Medicare. Providers are not permitted to bill dually eligible beneficiaries for such cost sharing. However, most states pay less than the amount of cost sharing allowed under Medicare. States can choose to limit their cost-sharing liability to the difference between the Medicare allowed amount and the Medicaid payment rate for a given service. For example, if a physician bills $100 for an office visit, and Medicare pays $80 with $20 allowed as cost sharing, a state will not pay the $20 on behalf of a dually eligible beneficiary if the state Medicaid payment rate for the physician office visit is $80 or less. If the state Medicaid rate is $90, the state will reduce its payment of Medicare cost sharing to $10. Dually eligible beneficiaries enrolled in MA plans are subject to the same cost-sharing rules the state applies to FFS Medicare beneficiaries in the state.

The policies on Medicare cost sharing for low-income beneficiaries can affect the bidding process under a CPC model and the ability of plans to establish adequate networks. Plans with a large proportion of dually eligible enrollees may have higher bids than plans with fewer dually eligible beneficiaries because providers may be less willing to accept dually eligible beneficiaries if the state refuses to pay the cost sharing. Consider the following example of two plans. Plan 1 has no dual-eligible enrollment and pays its physicians $100 per office visit, consisting of $80 from the plan and $20 in beneficiary cost sharing. In contrast, Plan 2 has 100 percent dual-eligible enrollment and has physicians receiving a total of $80 per office visit because no cost sharing can be collected. Each plan's bid for the Medicare Part A and Part B benefit package shows physician office visits costing the plan $80—in the same way that the Medicare FFS plan "bid"

EMBARGOED FOR RELEASE UNTIL 4:00PM JUNE 15, 2012

would have program payments of $80 for office visits. In a state that does not pay Medicare cost sharing above Medicaid payment levels, the physicians in Plan 2 may demand total revenue of $100 per office visit from the plan. Consequently, Plan 2 would then have to increase its bid to take into account the $100 per office visit it must pay physicians. Anecdotal evidence suggests that MA plan providers that currently have a large influx of new dually eligible beneficiaries are concerned about the reduced revenue.

To the extent that low-income beneficiaries will receive full subsidies only if they enroll in the lowest cost plans—or, as in Part D, are assigned to such plans with a choice to opt out—plan capacity is also an issue. The lowest cost plans may not be able to accommodate all low-income beneficiaries in an area, and they also may not wish to have an enrollment consisting exclusively or primarily of low-income beneficiaries. Moreover, if the composition of the lowest cost plans in an area changes from year to year, care transitions are an issue as low-income beneficiaries move back and forth between FFS and a private plan or among private plans. Part D has specific rules governing transitions, but transitions with a drug benefit are probably more manageable than transitions in medical care for a population that includes sicker beneficiaries with high levels of service use.

How a CPC model for Medicare benefits can interact with Medicaid benefits for dually eligible beneficiaries presents a particularly thorny issue. Some have suggested that Medicare Part D provides an example for incorporating Medicaid benefits under a CPC model. (Part D involved federalizing some part of the Medicaid benefit and "clawing back" financing from the states.) However, managing a drug benefit is much simpler and more straightforward than managing a medical benefit, which has more intrinsic variation. Moreover, there are a number of complicated issues related to the dually eligible population. It is a very heterogeneous population, and many of the beneficiaries are either physically or cognitively limited in significant ways. Such issues raise concerns that plans may not have the initial capacity to serve these unique populations. Consequently, a CPC approach that is primarily an insurance model does not address the medical care needs and social service issues for dually eligible beneficiaries. Those issues are very different from the issues related to integrating the dual-eligible population in the Part D program.

Additional considerations

This chapter represents the Commission's initial exploration of a CPC approach and is not intended to be a definitive or comprehensive discussion. Instead, we have focused on a few first-order questions and issues that must be addressed in designing a CPC model to understand their implications for beneficiaries, private plans, and the Medicare program.

As a result, important additional issues are not discussed in this chapter. Our analysis of plan bids and availability is based on current MA plan bids because they represent the best available measure of the total cost of providing the Medicare benefit through private plans. However, those bids might be an unreliable proxy for how plans would actually bid in a CPC model because its design is likely to differ from the current MA program. For example, under competitive bidding, private plans are likely to make different decisions regarding whether to enter or exit a particular market, how much to bid, and what benefit designs to offer.

We also did not address in this chapter how beneficiaries' choice of plans for Medicare coverage might change in a CPC model. Our analysis of beneficiary premium impacts suggests that any changes in the calculation of the federal contribution can affect beneficiaries financially. How beneficiaries respond to those changes by switching among plans and what factors affect their decisions are important issues. For example, beneficiaries' sensitivity to changes in premiums and their ability to meaningfully trade off premiums and other aspects of the benefit package can have important implications for their choice of plans and for the Medicare program.

Finally, under a CPC approach, decisions by private plans and beneficiaries may change or evolve over time. If they fluctuate from one year to the next, then the federal contribution amount, beneficiary premiums, and program spending could also fluctuate. Whether to moderate such fluctuations—or more generally, how to manage those changes over time—is an additional issue to consider. ■

EMBARGOED FOR RELEASE UNTIL 6:00PM JUNE 11, 2013

Endnotes

1 Despite their desire, beneficiaries may not be very good at "optimizing" their choices. Expected need for health care is quite unpredictable, and decision making under uncertainty is difficult. Moreover, beneficiaries' ability to choose can diminish if they have too many choices. The psychological and economic literature on decision making suggests that the benefit of additional choices follows an inverted-U shape: Neither too few nor too many choices is ideal.

2 When MA plans bid on the standard Part A and Part B benefit package, the statute specifies that a standard level of cost sharing for covered services assumed in the bid is equal to Medicare FFS cost sharing. In addition, a separate statutory provision limits the actual cost sharing that beneficiaries would have to pay in a plan to no more than the actuarial value of Medicare FFS cost sharing. Although MA plan bids are determined based on Medicare FFS cost-sharing levels, MA plans have significant leeway in determining how cost sharing will work in a plan. For example, while FFS Medicare has coinsurance for physician services, MA plans typically charge fixed copayments.

3 This is directionally consistent with a study by Song et al. (2012), which used a similar regression model. However, the Song study's coefficient on the benchmark variable was 0.49, almost double the coefficient in this study. The difference could be that our regression model included service use as a covariate rather than using Medicare spending as a covariate as Song did. When we dropped service use from the regression, our coefficient rose to 0.49, matching that in the Song et al. study. The correlation between service use and the benchmark relative to FFS is –0.52, which explains the sensitivity of the model to the inclusion or the exclusion of the variable.

4 Certainly, the opposite may also be true. In some areas, FFS Medicare might be the high-cost option compared with options offered by private plans, and including FFS Medicare could increase program spending. One design solution to overcome this problem is to set the maximum federal contribution equal to FFS spending in a given area. This approach is discussed further later in the chapter.

5 Under the MA program, private plans submit a bid to cover the Part A and Part B benefit for a beneficiary of average health status in counties they want to serve. The bid is the dollar amount of revenue that the plan estimates it needs to provide the benefit and includes plan administrative cost and profit. The plan's actual payment rate, however, is only partly determined by the bid: It also takes into account the relationship between the bid and the local MA benchmark and adjusts for enrolled beneficiaries' demographics and health risk characteristics. It should be noted that for regional PPOs, their benchmarks are a blend of the MA county benchmarks and regional PPO bids.

6 As of 2005, for the market areas, we are using core-based statistical areas, which is a collective term for metropolitan (50,000 or more in population) and micropolitan (10,000 to 49,999 in population) areas. Each area consists of one or more counties and includes the counties containing the core urban area as well as any adjacent counties that have a high degree of social and economic integration with the urban core as measured by commuting to work.

7 Health service areas are defined by the National Center for Health Statistics and consist of collections of counties where most of the short-term hospital care received by beneficiaries living in those counties occurs in hospitals in the same collection of counties.

8 Out of the 1,229 total, our analysis excluded 167 payment areas because we had no MA bids for those areas that met our criteria. The excluded areas contain about 2 percent of Medicare beneficiaries.

9 Fully dually eligible beneficiaries are entitled to Medicaid services not covered by Medicare. Such services include long-term care services and supports, behavioral health services, vision and dental care, and other wraparound services. Additionally, Medicare Savings Programs help beneficiaries with limited incomes pay for Medicare premiums and cost sharing. Beneficiaries with incomes up to 100 percent of the federal poverty level who meet their state's resource limits can enroll in the qualified Medicare beneficiary program with Medicaid covering their Part B premium and cost sharing, and beneficiaries with incomes below 135 percent of the poverty level can have their Part B premium covered under the specified low-income beneficiary or the qualifying individual program. See Chapter 6 of this report for more details on different categories of dually eligible beneficiaries.

10 Under the qualifying individual program, financial assistance is entirely federally funded.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

References

American Hospital Association. 2012. *Hospital statistics. Aggregate hospital payment-to-cost ratios for private payers, Medicare, and Medicaid, 1990–2010.* Chicago, IL: AHA. http://www.aha.org/research/reports/tw/chartbook/ch4.shtml.

Dowd, B. 2001. More on Medicare competitive pricing. Letter to the editor. *Health Affairs* 20, no. 1 (January–February): 206–207.

Dowd, B., R. Coulam, and R. Feldman. 2000. A tale of four cities: Medicare reform and competitive pricing. *Health Affairs* 19, no. 5 (September–October): 9–29.

Medicare Payment Advisory Commission. 2013. *Report to the Congress: Medicare payment policy.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2005. *Report to the Congress: Issues in a modernized Medicare program.* Washington, DC: MedPAC.

Song, Z., M. B. Landrum, and M. E. Chernew. 2012. Competitive bidding in Medicare: Who benefits from competition? *American Journal of Managed Care* 18, no. 9: 546–552.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

CHAPTER 2

Medicare payment differences across ambulatory settings

EMBARGOED FOR RELEASE UNTIL 1:30PM JUNE 14, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

CHAPTER 2

Medicare payment differences across ambulatory settings

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Chapter summary

Medicare's payment rates often vary for the same ambulatory services provided to similar patients in different settings, such as physicians' offices or hospital outpatient departments (OPDs). For example, in 2013, Medicare pays 141 percent more for a level II echocardiogram in an OPD than in a freestanding physician's office. These variations raise questions about how Medicare should pay for the same service when it is delivered in different settings.

If the same service can be safely provided in different settings, a prudent purchaser should not pay more for that service in one setting than in another. Payment variations across settings may encourage arrangements among providers that result in care being provided in higher paid settings, thereby increasing total Medicare spending and beneficiary cost sharing. In general, the Commission maintains that Medicare should base payment rates on the resources needed to treat patients in the most efficient setting, adjusting for differences in patient severity to the extent that severity differences affect costs.

Payment variations across settings urgently need to be addressed because many services have been migrating from physicians' offices to the usually higher paid OPD setting, as hospital employment of physicians has grown. This shift toward OPDs has resulted in higher program spending and

In this chapter

- How should Medicare pay for the same ambulatory services in different settings?
- Equalizing Medicare payment rates across settings for E&M office visits
- Aligning payment rates between OPDs and physicians' offices for other types of ambulatory services
- Aligning payment rates between OPDs and physicians' offices for cardiac imaging services
- Equalizing payment rates between OPDs and ASCs for certain ambulatory procedures

beneficiary cost sharing without significant changes in patient care. From 2010 to 2011, for example, the share of evaluation and management (E&M) office visits provided in OPDs increased by 9 percent, the share of echocardiograms provided in OPDs increased by 15 percent, and the share of nuclear cardiology tests in OPDs increased by 22 percent. If these three types of services continue to migrate to OPDs at the same annual rate from 2011 to 2021, Medicare spending would be $2.3 billion higher per year by 2021, and beneficiary cost sharing would be $590 million higher per year.

One way to address payment variations between physicians' offices and OPDs is to reduce payment rates in the outpatient prospective payment system (OPPS) so that payments are equal whether a service is provided in a freestanding physician's practice or in an OPD. However, for many services, equal payment rates would not account for some important differences between physicians' offices and OPDs that can lead to higher costs in OPDs. First, hospitals incur costs to maintain standby capacity for handling emergencies and to comply with additional regulatory requirements. Second, patient severity may be greater in OPDs, and it may cost more to treat sicker patients. Third, the OPPS is more likely than the fee schedule for physicians and other health professionals, also known as the physician fee schedule (PFS), to combine the cost of a primary service (such as a procedure) with ancillary services and supplies into a single payment. The PFS tends to pay separately for each component of a service. This difference in the packaging of services must be considered when comparing payment rates between settings. In our March 2012 report, we focused on nonemergency E&M office visits because they are largely unaffected by these differences between OPDs and freestanding offices. The Commission recommended that payment rates be equal whether an E&M office visit is provided in an OPD or in a freestanding office.

In this chapter, we examine other ambulatory services frequently performed in freestanding offices or ambulatory surgical centers (ASCs) that receive higher Medicare payments in OPDs. Although we explore options for reducing variations in payment rates across settings, we do not recommend payment changes in this chapter. We identified 66 groups of services provided in OPDs and freestanding offices that meet the Commission's principles for aligning payment rates across settings. Within each group, the services are frequently performed in physicians' offices, which indicates that they are likely safe and appropriate to provide in a freestanding office and that PFS payment rates are adequate to ensure beneficiaries' access; are infrequently provided with an emergency department (ED) visit when furnished in an OPD (such services are unlikely to have costs that are directly associated with operating an ED); have average patient severity that is no greater in

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

OPDs than in freestanding offices; and do not include 90-day global surgical codes. We divided these services into two categories:

- Group 1 includes services for which payment rates could be the same whether they are provided in a freestanding office or in an OPD (because the level of packaging across payment systems is similar).
- Group 2 includes services for which the gap in payment rates between OPDs and freestanding offices could be narrowed but for which the OPD rate should remain higher to account for the higher level of packaging in the OPPS.

Changing OPD payment rates for the services in Group 1 and Group 2 would reduce program spending and beneficiary cost sharing by $900 million in one year. Cost-sharing savings would range from $140 million to $380 million, depending on how OPPS copayments are determined. On average, hospitals' overall Medicare revenue would decline by 0.6 percent, and OPD revenue would fall by 2.7 percent.

An alternative policy would focus on aligning payment rates between OPDs and freestanding offices only for cardiac imaging services in Group 1 and Group 2—namely, echocardiography and cardiac nuclear tests. These services have been migrating rapidly from freestanding offices to OPDs as hospital employment of cardiologists has grown. In addition, payment rates are much higher when these services are provided in OPDs rather than offices. Reducing OPD payment rates for these cardiac imaging services would reduce program spending and beneficiary cost sharing by $500 million in one year, with reduced cost sharing accounting for about $100 million. On average, hospitals' overall Medicare revenue would decline by 0.3 percent, and OPD revenue would fall by 1.5 percent.

We also explored a policy that would equalize payment rates between OPDs and ASCs for certain ambulatory surgical procedures. Medicare currently pays 78 percent more in OPDs than in ASCs for the same procedure, and this payment gap has increased over time, influencing some ASC owners to sell their facilities to hospitals. We identified 12 groups of services that are commonly performed in ASCs for which the OPD payment rates could be reduced to the ASC level. These services are infrequently provided with an ED visit when furnished in an OPD and have average patient severity that is no greater in OPDs than in ASCs. This policy would reduce Medicare program spending and beneficiary cost sharing by about $590 million per year. Cost-sharing savings would range from $40 million to $220 million, depending on how OPPS copayments are determined. On average, hospitals' overall Medicare revenue would decline by 0.4 percent, and OPD revenue would fall by 1.7 percent.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

We are concerned about the impact of the policies discussed in this chapter on hospitals that provide ambulatory physician services to a disproportionate share of low-income patients, who may be more likely than other patients to use an OPD as their usual source of care. Because large reductions in Medicare revenue for these hospitals could adversely affect access to physicians' services for these patients, we consider a stop-loss policy that would limit the loss of Medicare revenue for these hospitals. ■

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

How should Medicare pay for the same ambulatory services in different settings?

Medicare's payment rates often vary for the same ambulatory services provided to similar patients in different settings, such as physicians' offices, hospital outpatient departments (OPDs), and ambulatory surgical centers (ASCs). CMS sets payment rates for physician and other practitioner services in the fee schedule for physicians and other health professionals, also known as the physician fee schedule (PFS); payment rates for most OPD services in the outpatient prospective payment system (OPPS); and payment rates for ASC services in the ASC payment system. For services provided in OPDs or ASCs, Medicare makes two payments: one for the physician's professional fee under the PFS and one for the OPD or ASC facility fee under the OPPS or ASC payment system (see text box, p. 32).

As an example of payment differences, in 2013, Medicare pays 141 percent more in an OPD than in a freestanding physician's office for a level II echocardiogram (counting the professional fee and facility fee). In addition, in 2013, Medicare pays 70 percent more in an OPD than in a freestanding office for a 15-minute evaluation and management (E&M) office visit.[1] These types of variations raise questions about how Medicare should pay for the same service when it is delivered in different settings.

The Commission's position is that Medicare should ensure that patients have access to settings that provide the appropriate level of care. From this perspective, if the same service can be safely provided in different settings, a prudent purchaser should not pay more for that service in one setting than in another. However, these payment differences between settings may cause Medicare and beneficiaries to pay more than necessary and may encourage arrangements among providers that result in more care being provided in higher paid settings. Therefore, in its fee-for-service payment systems, Medicare should strive to base payment rates on the resources needed to treat patients in the most efficient (i.e., highest quality, lowest cost) setting, adjusting for differences in patient severity to the extent that severity differences affect costs. In the absence of comparable data on providers' costs and quality across settings, Medicare should base payment rates on the setting where beneficiaries have adequate access to care at the lowest cost to the program and beneficiaries. Based on these principles, the Commission recommended in 2012 that Medicare reduce payment rates for E&M office visits provided in OPDs so that total payment rates would be equal whether these visits were provided in an OPD or in a freestanding physician's office (Medicare Payment Advisory Commission 2012c).

The goals of this chapter are to:

- move beyond E&M services and explore opportunities to align payment rates across settings for additional services that receive higher payments in OPDs than in other ambulatory settings;
- examine the impact of potential payment changes on Medicare spending, beneficiary cost sharing, and hospital revenue; and
- elicit feedback from the public on potential policy changes.

Although we explore options for reducing variations in payment rates across settings, we do not recommend payment changes in this chapter. We describe 66 groups of services provided in OPDs and physicians' offices that meet the Commission's principles for aligning payment rates across settings. Next we focus on a subset of the 66 groups: 3 groups of cardiac imaging services that have been migrating rapidly from freestanding offices to OPDs. Finally, we explore a policy that would equalize payment rates for certain ambulatory surgical procedures between OPDs and ASCs.

Some stakeholders have argued that Medicare should pay higher rates for all services provided in OPDs because the additional payments subsidize hospital standby capacity, access to care for low-income patients, efforts to improve care coordination, and community outreach. However, building indirect subsidies for these activities into the payment rates for all services does not directly target resources to these activities and can distort prices, which could have unintended consequences. For example, paying much more for cardiac tests in OPDs than in freestanding offices may encourage hospitals to purchase cardiology practices and shift cardiac testing to the OPD setting (see discussion, p. 33). In addition, paying higher rates for services provided in OPDs is an inefficient way to reward hospitals for improving care (such as reducing readmissions) because it does not distinguish between hospitals that improve care and reduce spending and those that do not. Although some of the hospitals

EMBARGOED FOR RELEASE UNTIL 12PM JUNE 14, 2013

How Medicare pays for services in physicians' offices and hospital outpatient departments

Services covered under the fee schedule for physicians and other health professionals, also known as the physician fee schedule (PFS), have two payment rates: one for when the physician provides the service in his or her office (the nonfacility rate) and another for when the physician provides the service in a facility such as a hospital outpatient department (OPD), other provider-based entity, or ambulatory surgical center (the facility rate).[2] An outpatient facility that has provider-based status is considered part of a hospital, and provider-based status is available for hospital-owned entities that meet certain rules, such as being located on the hospital campus or off campus but within 35 miles of the hospital campus. In general, the nonfacility rate is higher than the facility rate in the PFS because physicians' practice costs are higher when physicians provide care in their offices instead of in facilities because they have to cover their direct costs (e.g., equipment, supplies, and staff) and have higher overhead costs.

When a service is provided in a physician's office, there is a single payment for the service. However, when a service is provided in a facility, Medicare makes a payment to the facility in addition to the payment to the physician. For example, if a 15-minute evaluation and management office visit for an established patient (Current Procedural Terminology code 99213) is provided in a freestanding physician's office, the program pays the physician 80 percent of the nonfacility payment rate from the PFS and the beneficiary is responsible for the remaining 20 percent. In 2013, the PFS nonfacility rate for this service is $72.50; the program pays $58.00 and the patient is responsible for $14.50 (Table 2-1). If the same service is provided in an OPD, the program pays 80 percent of the PFS facility rate and 80 percent of the rate from the outpatient prospective payment system and the patient is responsible for 20 percent of both rates.[3] The PFS facility rate in 2013 is $49.70, and the OPPS payment is $73.68, for a total payment of $123.38. The program pays $98.70 and the patient is responsible for $24.68. ■

TABLE 2–1

Medicare and beneficiaries pay more for a 15-minute E&M office visit provided in an OPD than in a freestanding physician's office, 2013

	Service provided in freestanding physician practice*	Service provided in OPD		
		Physician facility rate*	OPPS rate	Total, OPD rate
Program payment	$58.00	$39.76	$58.94	$98.70
Beneficiary cost sharing	14.50	9.94	14.74	24.68
Total payment	72.50	49.70	73.68	123.38

Note: E&M (evaluation and management), OPD (hospital outpatient department), OPPS (outpatient prospective payment system). The Current Procedural Terminology code for this visit is 99213.
*Paid under the Medicare physician fee schedule.
Source: MedPAC analysis of payment rates in the 2013 physician fee schedule and OPPS.

EMBARGOED FOR RELEASE
UNTIL 1:00 PM
JUNE 18, 2013

that benefit from the higher rates that Medicare pays for services delivered in OPDs relative to freestanding offices have lower Medicare spending per episode of care, others have higher spending per episode (see text box, pp. 34–35). Medicare should directly reward those hospitals that improve care and reduce utilization.

With regard to hospital costs that are associated with community benefits but are hard to quantify, such as the cost of standby capacity, these costs should be considered as part of the Commission's annual assessment of payment adequacy. Each year in our March report, we examine whether aggregate Medicare payments to hospitals are adequate to cover the costs efficient hospitals incur (Medicare Payment Advisory Commission 2013). We also consider beneficiaries' access to care, hospitals' access to capital, and changes in the quality of care.

TABLE 2–2

E&M office visits and cardiac imaging services migrated from freestanding offices to OPDs, where payment rates are higher

Type of service	Share of ambulatory services performed in OPDs, 2011	Per beneficiary volume growth, 2010–2011	
		Freestanding office	OPD
E&M office visits (CPT codes 99201–99215)	9.7%	–0.2%	7.8%
Echocardiograms without contrast (APCs 269, 270, 697)	29.6	–6.3	17.6
Nuclear cardiology (APCs 377, 398)	33.0	–12.0	13.6

Note: E&M (evaluation and management), OPD (hospital outpatient department), CPT (Current Procedural Terminology), APC (ambulatory payment classification).

Source: MedPAC analysis of Standard Analytic Claims Files from 2010 and 2011.

Payment variations across settings urgently need to be addressed because many ambulatory services have been migrating from physicians' offices to the usually higher paid OPD setting, as hospital employment of physicians has increased. According to data from the American Hospital Association annual survey of hospitals, the number of physicians and dentists employed by hospitals was relatively constant from 1998 to 2003 but grew by 55 percent from 2003 to 2011.[4] A survey conducted by the American College of Cardiologists found that the share of cardiologists who are employed by hospitals tripled between 2007 and 2012, from 11 percent to 35 percent (American College of Cardiology 2012). During that period, the proportion of cardiologists who work for physician-owned practices fell from 59 percent to 36 percent.[5] In addition, in most of the 12 health care markets examined by the Center for Studying Health System Change, hospitals have increased the number of employed physicians over the last 3 years (Berenson et al. 2012).

Many factors have been cited for the trend toward greater physician employment by hospitals:

- Physicians face rising costs to operate a private practice, including new technology such as electronic health records and the administrative costs of dealing with separate insurers (O'Malley et al. 2011).
- Many physicians desire a different work–life balance and more lifestyle flexibility than has been typical in the past (Kocher and Sahni 2011).
- Hospitals often choose to employ physicians to ensure a stable stream of tests, admissions, and referrals to specialists. They are also interested in acquiring physician practices to prepare for new payment models such as accountable care organizations, which are integrated systems that take responsibility for controlling spending and improving quality.
- Medicare and many private insurers pay higher rates for many services provided in OPDs relative to physicians' offices (Ginsburg 2011, Jain 2012, Kocher and Sahni 2011, O'Malley et al. 2011).

As more physicians become employed by hospitals, service billing is shifting from freestanding physicians' offices to OPDs. Among E&M office visits, echocardiograms, and nuclear cardiology, for example, the volume of services decreased in freestanding offices and increased in OPDs from 2010 to 2011 (Table 2-2).

Because most services receive higher payment rates when provided in OPDs than in freestanding offices, the migration of services to OPDs results in higher program spending and beneficiary cost sharing without significant changes in patient care. In many cases, a physician's practice that is purchased by a hospital stays in the same location and treats the same patients (Dutton 2012, Mathews 2012, Schulte 2012). Nevertheless, if the hospital converts a practice to an OPD and begins billing under the OPPS, Medicare and beneficiaries pay more for the same services. The growth in hospital employment of physicians and the associated increase in payment rates also affect private plans and their enrollees (see text box, p. 36).

From 2010 to 2011, the share of E&M office visits provided in the OPDs of OPPS hospitals increased by 9 percent. If this annual rate of increase continues from 2011

EMBARGOED FOR RELEASE UNTIL 11:00 AM JUNE 14, 2013

The relationship between higher hospital outpatient department payment rates and Medicare spending per episode is weak

Some stakeholders claim that when services are provided in hospital outpatient departments (OPDs) instead of in freestanding offices, care is better integrated and coordinated, lowering spending per episode of care. According to this argument, the higher rates that Medicare pays for services delivered in OPDs relative to freestanding offices are more than offset by the savings from fewer services delivered during an episode. An alternative hypothesis is that the higher payment rates for OPDs are associated with higher spending per episode. To examine this issue, we analyzed the relationship between hospitals' Medicare spending per episode and the share of hospitals' Medicare revenue that comes from higher OPD payment rates for evaluation and management (E&M) office visits and the services in 66 ambulatory payment classification (APC) groups (these 66 APCs are discussed on pp. 37–40). We found a weak negative correlation between the share of revenue hospitals gain from higher OPD rates and 30-day episode spending (Figure 2-1).

Each hospital in Figure 2-1 is represented as a distinct data point. The horizontal axis in Figure 2-1 displays each hospital's 30-day episode spending relative to the median hospital. We obtained this information from CMS's Medicare Spending Per Beneficiary (MSPB) measure, which evaluates hospitals' efficiency relative to the efficiency of the median hospital (Centers for Medicare & Medicaid Services 2012). The MSPB measure is based on Medicare payments for services performed by hospitals and other providers during an episode, which comprises the period immediately before, during, and 30 days after a patient's hospital stay. Hospitals with a score greater than one are less efficient than average and hospitals with a score less than one are more efficient than average. The vertical axis in Figure 2-1 displays the share of hospitals' overall Medicare revenue that comes from the difference between payment rates for E&M office visits and 66 APCs in OPDs and freestanding offices.

If hospitals that benefit more from higher OPD payments for these services had lower spending per episode, the data points would cluster tightly around a downward-sloping line, indicating that a large share of the variation in episode spending is explained by the share of hospitals' Medicare revenue that comes from the higher payment rates for services delivered in OPDs relative to freestanding offices. Conversely, if hospitals that benefit more from higher OPD payments had higher spending per episode, the data points would cluster tightly around an upward-sloping line. However, the data points are largely random. We performed a regression that used relative spending per episode as the dependent variable and the share of hospitals' Medicare revenue that comes from the difference between payment rates for E&M visits and 66 APCs in OPDs and freestanding offices as the explanatory variable. This regression produced a coefficient on the explanatory variable that was statistically significant but small: A 1 percentage point increase in a hospital's share of overall Medicare revenue that comes from higher payment rates for these services results in a decline in the MSPB efficiency measure of 0.01 (a decline in MSPB indicates an improvement in efficiency). In addition, this regression had an R^2 (a measure of statistical correlation) of 0.05, indicating a weak relationship between higher OPD payments and spending per episode. One factor that could explain why the relationship is weak is that the MSPB measure is primarily composed of spending for inpatient and post-acute care services rather than ambulatory care services. In summary, it appears that hospitals that receive a relatively high share of revenue from the higher

(continued next page)

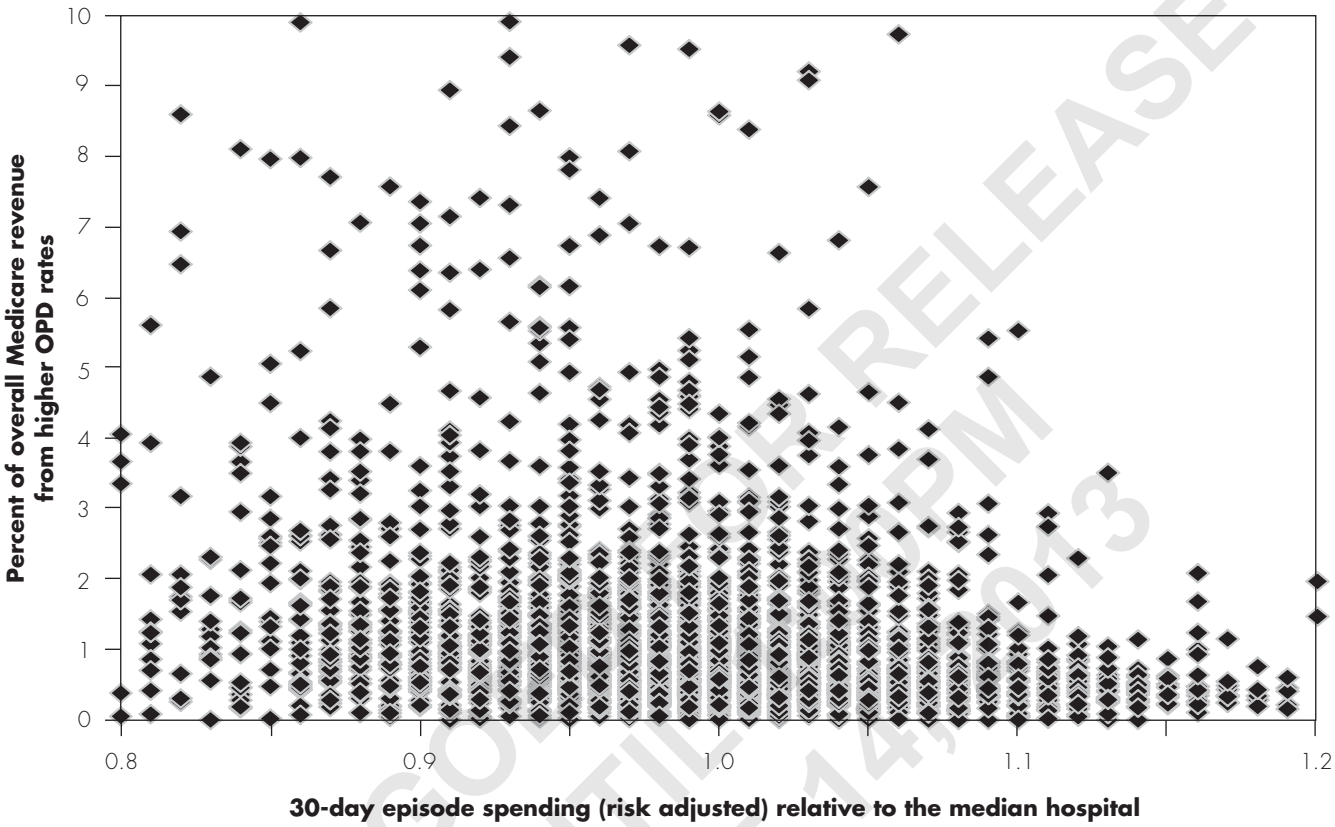
EMBARGOED FOR RELEASE UNTIL 4:00PM JUNE 14, 2013

to 2021, 20 percent of E&M visits would be provided in OPDs in 2021. Such a shift would increase Medicare spending by $1.2 billion per year and beneficiary cost sharing by $300 million per year (assuming 2013 payment rates). From 2010 to 2011, the share of echocardiograms provided in OPDs increased by about 15 percent, and the share of nuclear cardiology tests provided in OPDs increased by about 22 percent.[6] If these annual rates of increase continue from 2011 to 2021, virtually all of these services in ambulatory settings would be provided in OPDs.[7] Assuming 2013 payment rates for the OPPS and PFS, this shift would increase Medicare spending by

The relationship between higher hospital outpatient department payment rates and Medicare spending per episode is weak (cont.)

FIGURE 2–1

Weak correlation between revenue gains from higher OPD rates and 30-day episode spending



Note: OPD (hospital outpatient department). Each hospital is represented as a distinct data point. The horizontal axis displays hospitals' risk-adjusted Medicare spending for a 30-day episode relative to the median hospital. This information is from CMS's Medicare Spending Per Beneficiary Measure (MSPB), which evaluates hospitals' efficiency relative to the efficiency of the median hospital. The vertical axis displays the percent of hospitals' overall Medicare revenue that comes from the difference between OPD and physician office payment rates for services in Group 1 and Group 2 and evaluation and management office visits. See online-only Appendix 2-A, available at http://www.medpac.gov, for a list of services in Group 1 and Group 2.

Source: MedPAC analysis of 100 percent Standard Analytic Claims Files from 2010 and CMS's MSPB for 2011

rates for certain OPD services are only marginally more efficient, on average. Even if these hospitals were substantially more efficient, however, paying higher rates for OPD services to all hospitals—whether or not they are efficient—is not a good use of Medicare's limited funds. A better alternative would be to directly reward hospitals that achieve lower spending per beneficiary for an episode of care. ■

EMBARGOED UNTIL UPON RELEASE
JUNE 14, 2013 12 PM

$1.1 billion per year and beneficiary cost sharing by $290 million per year.

One way to address payment variations between physicians' offices and OPDs is to set payment rates so that they are equal whether a service is provided in a freestanding physician's office or in an OPD. There are precedents for this approach: Medicare pays the same amount for outpatient therapy services, mammography tests, dialysis services, and clinical lab tests regardless of setting. However, important differences between

Growth of hospital employment of physicians leads to higher spending by private plans and their enrollees

The growth of hospital employment of physicians is leading to higher spending by private plans outside of Medicare and higher cost sharing for their enrollees (Alexander et al. 2012, Dutton 2012, Kowalczyk 2013a, Kowalczyk 2013b, Mathews 2012). In one example, a patient found that his insurance plan paid $1,605 for an echocardiogram after his cardiologist's practice was acquired by a hospital system—more than four times the amount paid by the plan when the practice was independent (Mathews 2012). The patient's share of the bill was about $1,000. According to the patient, "Nothing had changed, it was the same equipment, the same room." In another example, a patient who received a 20-minute exam in a hospital-owned practice was charged a $500 facility fee in addition to the physician's $250 professional fee (Kowalczyk 2013a). In some cases, private plans have stopped paying the additional facility fee for routine office visits provided in hospital-owned entities (Kowalczyk 2013a, Ostrom 2012). ■

physicians' offices and OPDs can lead to higher costs in OPDs for certain services:

- Hospitals incur costs to maintain standby capacity for handling emergencies. They are subject to the Emergency Medical Treatment and Active Labor Act of 1986 (EMTALA), which requires them to screen and stabilize (or transfer) patients who believe they are experiencing a medical emergency, regardless of their ability to pay.[8]
- Patients who receive a given service in an OPD may be more medically complex than patients who receive the same type of service in a freestanding office; it may require more time and resources to treat these patients.
- Hospitals face a unique set of licensing and accreditation requirements that increase their cost structure. Hospitals are required to meet conditions of participation in the Medicare program, which add to their costs; these conditions do not apply to freestanding physicians' offices. Hospitals also must comply with more stringent building codes and life-safety codes. In addition, an outpatient facility that is considered part of a hospital must meet CMS's rules for provider-based status, such as maintaining financial integration with the parent hospital. When a hospital purchases a freestanding office and converts it to an OPD to obtain higher payment rates, the hospital may need to make changes to the office to comply with these additional regulatory requirements. These changes could increase the costs incurred by the provider, Medicare, and beneficiaries without evidence that patient care has improved.
- The OPPS is more likely than the PFS to combine the cost of primary services with ancillary services and supplies into a single payment (this concept is called packaging); the PFS tends to pay separately for each item. Therefore, some portion of the higher OPPS payment rates for many services reflects a greater level of packaging.

Equalizing Medicare payment rates across settings for E&M office visits

For our March 2012 report, we focused on E&M office visits, which are similar across settings (Medicare Payment Advisory Commission 2012c). These services are indicated by Current Procedure Terminology (CPT) codes 99201 through 99215 and are included in ambulatory payment classification (APC) groups 604 through 608. For these services, it is reasonable to equalize payment rates in physicians' offices and OPDs because:

- Hospitals do not need to maintain standby capacity for E&M visits that are not provided in an emergency department (ED), nor do the EMTALA requirements to screen and stabilize patients presenting at EDs affect the costs of furnishing E&M visits in OPDs.
- To a large extent, differences in resource needs because of patient complexity for these visits are

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

reflected in their coding structure, which classifies visits based on their length and complexity.[9]

- The extent to which ancillary items are packaged with E&M services is similar across the PFS and OPPS. On the basis of our analysis of 10,000 OPD claims that included an E&M visit, the cost of ancillary services that were packaged with these visits when provided in an OPD was about 2.5 percent of the visits' total cost. In other words, ancillaries add about $2 to the payment rate of the average E&M visit provided in an OPD.

The Commission recommended that total payment rates for an E&M visit provided in an OPD should be reduced to the amount paid when the same visit is provided in a freestanding office, which is the lower cost setting (Medicare Payment Advisory Commission 2012c). To equalize the total rates, the OPPS payment for an E&M visit would be reduced so that it equals the difference between the nonfacility practice expense (PE) amount and the facility PE amount in the PFS (see online-only Appendix 2-B, available at http://www.medpac.gov).

We estimated that this recommendation would reduce hospitals' overall Medicare revenue by 0.6 percent and outpatient revenue by 2.8 percent, but the effect would vary widely by type of hospital. For example, major teaching hospitals would have the largest loss of overall Medicare revenue (1.1 percent) and for-profit hospitals would have the smallest loss (0.2 percent) (Medicare Payment Advisory Commission 2012c). To allow time for hospitals to adjust to the lower rates for E&M visits, we recommended that this policy be phased in over three years.

In developing this recommendation, we were concerned that some hospitals that provide access to ambulatory physician services for low-income patients might experience significant reductions in Medicare revenue, which could potentially reduce access for these patients. Therefore, during the three-year phase in, we recommended that revenue losses from this policy be limited to 2 percent of overall Medicare revenue for hospitals that serve a relatively large share of low-income patients, defined as having a disproportionate share (DSH) percentage that is at or above the median for all hospitals (about 25.6 percent in 2010).[10] In addition, we recommended that the Secretary study whether equalizing payment rates for E&M visits would impair access for low-income patients to ambulatory physician services. If the Secretary finds access problems, targeted actions should be undertaken to protect access.

Aligning payment rates between OPDs and physicians' offices for other types of ambulatory services

We have identified services beyond E&M office visits that meet the Commission's principles for aligning payment rates between OPDs and freestanding offices. We classify these services into two categories:

- ***Group 1*** includes services for which payment rates could be equal across settings, and
- ***Group 2*** includes services for which the OPD rate could be higher than the physician office rate but the difference could be reduced from the current level (see online-only Appendix 2-A, available at http://www.medpac.gov, for the list of services in Group 1 and Group 2).[11]

Like the Commission's recommendation to equalize payment rates for E&M office visits across settings, a policy of aligning payment rates between OPDs and freestanding offices for additional services would not apply to critical access hospitals (CAHs); hospitals in Maryland; and hospitals outside the 50 states, the District of Columbia, and Puerto Rico because these entities are not paid under the OPPS.

Group 1: Services for which OPD and physician office payment rates could be equal

Group 1 includes services that meet the following five criteria for equalizing payment rates between OPDs and freestanding offices (E&M visits also meet these criteria):

- are frequently performed in physicians' offices (more than 50 percent of the time), indicating that they are likely safe and appropriate to provide in a freestanding physician's office and the PFS payment rates for these services are sufficient to ensure access to care;
- have minimal packaging differences across payment systems (i.e., the payment rate includes a similar set of services);
- are infrequently provided with an ED visit when furnished in an OPD (such services are unlikely to have costs that are directly associated with operating an ED);
- have patient severity that is no greater in OPDs than in freestanding offices; and

EMBARGOED FOR RELEASE UNTIL 11AM JUNE 14, 2013

- are not 90-day global surgical codes (CMS assumes that physicians' costs for these codes are higher when performed in a hospital than in a freestanding office).[12]

To identify services that meet these criteria, we grouped individual CPT codes into APCs because the OPPS uses APCs to classify services for payment.[13] Each of the criteria must be met at the APC level rather than at the level of each CPT code that is included in an APC. For example, we apply the criterion that at least 50 percent of an APC's volume must have been performed in freestanding offices to the entire APC rather than to each CPT code within the APC.

We used 2010 claims data for the following analyses:

- For each APC, we determined the total volume of services provided in OPDs and freestanding offices. We then identified APCs for which at least 50 percent of the total volume occurred in freestanding offices.[14]
- We classified APCs as having minimal packaging if less than 5 percent of their OPD costs were related to packaged ancillaries, such as drugs and minor procedures. We used claims data from CMS to compute the total cost incurred by OPDs to furnish the services in each APC and the share of the total cost related to packaged ancillaries.
- For each APC, we determined how frequently services provided in OPDs were billed on the same claim or date of service as an ED visit. When an APC was provided with an ED visit less than 10 percent of the time, we assumed that the APC's total costs were minimally affected by the cost of operating an ED. The EMTALA requirement for hospitals to screen and stabilize patients who believe they are experiencing an emergency should have a very small impact on the cost of furnishing these APCs.
- For each APC, we calculated the share of volume related to services with 90-day global surgical codes. We excluded APCs from our analysis if 90-day global codes accounted for at least 5 percent of their total volume.
- For each APC, we examined differences in patient severity among patients treated in OPDs and freestanding offices. We used risk scores from the CMS–hierarchical condition categories (CMS–HCC) risk-adjustment model used in Medicare Advantage to measure patient severity. CMS–HCC risk scores predict beneficiaries' relative costliness based on diagnoses from the prior year and demographic information. Beneficiaries who have higher risk scores are likely to be sicker and may require more time and resources to treat. We calculated the mean risk score for patients treated in OPDs and the mean risk score for patients treated in physicians' offices for each APC. If the mean OPD risk score was not statistically higher than the mean office risk score, we assumed that the severity of patients who received that group of services in OPDs was no greater than the severity of patients treated in offices.[15]

The limitation of using risk scores to estimate the relative cost of providing a specific service across settings is that the scores predict patients' relative costliness across the full range of health care services and do not necessarily indicate that a patient who has a high risk score will be more costly for a specific service. Despite these limitations, we used CMS–HCC risk scores as a proxy for patient severity because we do not have comparable cost data for OPDs and freestanding offices that would allow us to directly evaluate the impact of patient severity on the cost of providing individual services. In recent work, the Commission used CMS–HCC risk scores to examine variations in beneficiaries' health status across OPDs and ASCs (Medicare Payment Advisory Commission 2013).

We identified 24 APCs that met the 5 criteria for equal payment rates between OPDs and freestanding offices. The total payment for these APCs can be made equal across settings if we replace the existing OPPS payment rate with a rate that equals the difference between the nonfacility PE rate and the facility PE rate in the PFS (Table 2-3). We adjusted OPPS payment rates at the APC level rather than the CPT level. Most APCs have more than one CPT code, and all CPT codes in the same APC have the same payment rate under the OPPS. In contrast, the PFS has separate payment rates for each CPT code. When we adjusted the OPPS payment rate for an APC, we used a weighted average of the payment rates from the PFS for the CPT codes in that APC. For a more detailed discussion of our method of identifying services that met the criteria for Group 1 and Group 2, and our method of aligning payment rates between OPDs and freestanding offices for Group 1 and Group 2, see online-only Appendix 2-B, available at http://www.medpac.gov.

When a physician provides a service in a freestanding office or in an OPD, the physician's payment under the PFS has three components: physician work, PE, and

EMBARGOED FOR RELEASE UNTIL 6:00PM JUNE 14, 2013

TABLE 2–3

Differences in payment rates for level II echocardiogram without contrast provided in physician's office and OPD, 2013

	Payment amount	Calculation
Current payment rates		
Service in physician's office		
Payment to physician	$188.31	Work ($) + PLI ($) + nonfacility PE ($)
Service in OPD		
Payment to physician	$62.40	Work ($) + PLI ($) + facility PE ($)
Payment to hospital	$390.49	OPPS rate ($)
Total payment	$452.89	
Policy that aligns rates across settings		
Service in OPD		
Payment to physician	$62.40	Work ($) + PLI ($) + facility PE ($)
Payment to hospital	$125.91	Nonfacility PE ($) – facility PE ($)
Total payment	$188.31	

Note: OPD (hospital outpatient department), PLI (professional liability insurance), PE (practice expense), OPPS (outpatient prospective payment system). Payments include both program spending and beneficiary cost sharing. The services in this table are in ambulatory payment classification (APC) 269. When the services in this APC are provided in a physician's office, the average payment amount for physician work is $44.31, the PLI amount is $1.72, and the nonfacility PE amount is $142.28. When the services in this APC are provided in an OPD, the average payment amount for physician work is $44.31, the PLI amount is $1.72, and the facility PE amount is $16.37.

Source: MedPAC analysis of physician fee schedule and OPPS payment rates for 2013.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

professional liability insurance (PLI). The work and PLI payments are the same regardless of setting. However, the PE payment for a service provided in a freestanding office (the nonfacility PE) is usually higher than the PE payment for a service provided in an OPD (the facility PE). The higher nonfacility PE payment reflects the cost of the clinical staff, medical equipment, medical supplies, and additional overhead incurred by the physician. Therefore, the PFS payment is higher in a freestanding office than in an OPD for most services. However, when a service is provided in an OPD, Medicare makes an additional payment to the hospital under the OPPS. In most cases, the PFS payment for a service that is provided in a freestanding office is lower than the combined OPD and PFS payments for a service delivered in an OPD.

For example, when a level II echocardiogram without contrast is provided in a freestanding office, the payment to the physician equals physician work plus PLI plus nonfacility PE, which totals $188.31 in 2013 (Table 2-3). If the service is provided in an OPD, the total payment equals the sum of the work, PLI, facility PE, and OPPS payment for a total of $452.89. However, if the OPPS rate is set equal to the difference between the nonfacility PE rate and the facility PE rate, the OPPS rate would drop to $125.91 and the total payment would fall to $188.31, which is the same rate that is paid in a freestanding office.

Most of the APCs that met the criteria for Group 1 were diagnostic tests, such as:

- level II echocardiogram without contrast (APC 269),
- level II extended electroencephalography (EEG), sleep, and cardiovascular studies (APC 209),
- bone density: axial skeleton (APC 288), and
- level II neuropsychological testing (APC 382).

Some procedural APCs also met the criteria, such as level II eye tests and treatments (APC 698). An example of a service in APC 698 is extended visual field exams such as Goldman visual fields, CPT code 92083.

Group 2: Services for which the gap in payment rates between OPDs and physicians' offices could be reduced

Group 2 includes 42 APCs that have a significantly higher level of packaging in the OPPS than in the PFS (the cost of packaged ancillaries was more than 5 percent of their total OPD cost) but met the other 4 criteria for equal payment rates between OPDs and freestanding offices. Medicare could allow the OPD payment rate for these services to exceed the freestanding office rate by an amount equal to the cost of the additional packaging in the OPPS.[16] An

TABLE 2–4

Differences in payment rates for level III echocardiogram without contrast provided in physician's office and OPD, 2013

	Payment amount	Calculation
Current payment rates		
Service in physician's office		
Payment to physician	$278.61	Work ($) + PLI ($) + nonfacility PE ($)
Service in OPD		
Payment to physician	$94.82	Work ($) + PLI ($) + facility PE ($)
Payment to hospital	$558.66	OPPS rate ($)
Total payment	$653.48	
Policy that aligns rates across settings and adjusts for packaging		
Service in OPD		
Payment to physician	$94.82	Work ($) + PLI ($) + facility PE ($)
Payment to hospital for primary service	$183.79	Nonfacility PE ($) – facility PE ($)
Payment to hospital for packaged services	$166.15	
Total payment	$444.76	

Note: OPD (hospital outpatient department), PLI (professional liability insurance), PE (practice expense), OPPS (outpatient prospective payment system). Payments include both program spending and beneficiary cost sharing. The services in this table are in ambulatory payment classification (APC) 270. When the services in this APC are provided in a physician's office, the average payment amount for physician work is $68.95, the amount for PLI is $3.16, and the nonfacility PE amount is $206.49. When the services in this APC are provided in an OPD, the average payment amount for physician work is $68.95, the amount for PLI is $3.16, and the facility PE amount is $22.70.

Source: MedPAC analysis of physician fee schedule and OPPS payment rates for 2013.

example of an APC in Group 2 is level III echocardiogram without contrast (APC 270), for which about 30 percent of its OPD costs are related to packaged ancillaries, such as pharmaceuticals, supplies, and related imaging services. We calculated a revised OPD payment rate for this APC as follows (Table 2-4). First, we computed a payment to the hospital for the primary service that equals the difference between the nonfacility PE rate and the facility PE rate in the PFS ($183.79). Next, we added a payment to the hospital to cover the cost of services that are packaged under the OPPS ($166.15). Finally, we added the physician payment ($94.82). The total hospital payment would be $444.76 (instead of the current payment of $653.48).

APCs in Group 2 cover a broad spectrum, including:

- minor procedures such as level I debridement and destruction (APC 12),
- more advanced procedures such as small intestine endoscopy (APC 142),
- advanced imaging such as cardiac computed tomographic imaging (APC 383), and
- tests such as level IV pathology (APC 344).

Effects of equalizing or limiting differences in payment rates between physicians' offices and OPDs

For APCs in Group 1, we estimated OPPS payment rates that would result in equal total payment rates in offices and OPDs. For APCs in Group 2, we estimated OPPS payment rates that account for the cost of additional packaged services in the OPPS but would otherwise produce equal payments across settings. We modeled the effect of these changes on program spending and beneficiary cost sharing for each of the 66 APCs in Group 1 and Group 2. For some APCs, the spending and cost sharing would decline substantially; for others the decline would be small; and for a few it would increase (when the OPD rate is currently below the physician office rate) (Table 2-5). Changing OPPS payment rates for APCs in Group 1 and Group 2 would, on net, reduce program spending and beneficiary cost sharing by a total of $900 million in one year.

Impact on beneficiary cost sharing

Beneficiary cost-sharing savings would range from $140 million to $380 million, depending on how OPPS copayments are determined. When CMS adopted the OPPS, beneficiary copayments for many OPD services

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

TABLE 2–5

Ten APCs with the largest reduction in program spending and beneficiary cost sharing and 10 APCs with the largest increase in spending and cost sharing due to reducing differences in payment rates across settings, 2012

APC	APC description	Change in program spending and cost sharing: Total program spending (in millions)	Change in program spending and cost sharing: Cost sharing (in millions)
10 APCs with largest reduction			
269	Level II echocardiogram without contrast	–$308.5	–$61.7
207	Level III nerve injections	–170.3	–34.1
377	Level II cardiac imaging	–168.5	–33.7
209	Level II extended EEG, sleep, and cardiovascular studies	–55.5	0.0
204	Level I nerve injections	–46.7	0.0
15	Level III debridement and destruction	–45.9	–9.2
440	Level V drug administration	–31.1	–6.2
20	Level II excision/biopsy	–30.0	–6.0
74	Level IV endoscopy upper airway	–28.1	0.0
160	Level I cystourethroscopy and other genitourinary procedures	–25.6	–5.1
10 APCs with largest increase			
126	Level I urinary and anal procedures	0.6	0.0
692	Level III electronic analysis of devices	0.6	0.1
678	External counterpulsation	0.7	0.1
1	Level I photochemotherapy	0.8	0.2
383	Cardiac computed tomographic imaging	0.9	0.2
300	Level I radiation therapy	2.0	0.4
288	Bone density: axial skeleton	6.1	0.0
96	Level II noninvasive physiologic studies	9.3	0.0
344	Level IV pathology	39.1	0.0
412	IMRT treatment delivery	159.6	31.9

Note: APC (ambulatory payment classification), EEG (electroencephalography), IMRT (intensity-modulated radiation therapy). We modeled cost-sharing changes based on current law: Copayments for APCs that are currently higher than 20 percent of the total payment rate would stay the same even if the total payment rate declines. APCs with copayments that equal 20 percent of the total payment rate would stay at 20 percent, but the copayment amount would be smaller if the total payment rate declines.

Source: MedPAC analysis of 100 percent Standard Analytic Claims files from 2010. MedPAC analysis of payment rates in the 2010 physician fee schedule and outpatient prospective payment system (OPPS) trended forward to 2012 using updates to the physician fee schedule and OPPS.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

exceeded 20 percent of the total payment amount. The statute mandated that copayments would be frozen over time until they equaled 20 percent of the payment rate for all services. Currently, some of the APCs in Group 1 and Group 2, such as APC 269 (level II echocardiogram without contrast), have copayments that have reached the 20 percent level. However, other APCs, such as APC 209 (level II extended EEG, sleep, and cardiovascular studies), have copayments that continue to exceed 20 percent of the total payment amount.

One option is to set the copayment based on current law. Copayments for APCs above the 20 percent threshold would stay the same even when total payment rates change. For example, APC 209 has a copayment of $269 in 2013, which is 33 percent of the total payment rate. The copayment for this APC would remain $269, even when the total payment rate declines. APCs with copayments that have reached the 20 percent level would stay at 20 percent, but the copayment amount would be smaller if the total payment rate declines. For example, APC 269 has a copayment of $78 in 2013, which is 20 percent of the payment rate. To equalize payment rates across settings for this APC, the OPPS rate would decline from $390 to $126 and the copayment would decline to $25 (20 percent of $126) (Table 2-6, p. 42). This approach would maximize program savings; the Medicare program would save $760 million and beneficiaries would save $140 million in one year.

A second option is to keep the cost-sharing percentage constant for each APC after the total payment rate

TABLE 2–6

Illustration of three options for setting OPPS copayment amounts when payment rates are aligned for APC 269 and APC 209

	APC 269	APC 209
Current OPPS payment rate	$390	$806
Current copayment	$78	$269
Copay as percent of payment rate	20%	33%
Adjusted payment rate	$126	$528
Options for setting the copayment		
(1) Under current law	$25	$269
(2) Copay percent is constant	$25	$176
(3) Copay is 20% of payment rate	$25	$106

Note: OPPS (outpatient prospective payment system), APC (ambulatory payment classification). APC 269 is level II echocardiogram without contrast; APC 209 is level II extended electroencephalography, sleep, and cardiovascular studies. Current law requires that copayments stay at their current level if they are more than 20 percent of the payment rate. If copayments equal 20 percent of the payment rate, then they stay at 20 percent when the payment rate changes.

Source: MedPAC analysis of 2013 payment rates for APCs 269 and 209 under the OPPS.

TABLE 2–7

Reduction in overall Medicare revenue from aligning payment rates across settings for selected ambulatory services (APCs in Groups 1 and 2 and E&M visits)

	Percent loss of overall Medicare revenue			
	Group 1 and Group 2		Group 1 and Group 2, with E&M visits	
	Without stop-loss	With stop-loss	Without stop-loss	With stop-loss
All hospitals	0.6%	0.6%	1.2%	1.0%
Percent loss in revenue at:				
10th percentile	0.1	0.1	0.2	0.2
90th percentile	1.7	1.7	2.8	2.0
Urban	0.5	0.5	1.1	0.9
Rural	0.9	0.9	1.7	1.6
Nonprofit	0.6	0.6	1.1	1.0
For profit	0.5	0.5	0.8	0.7
Government	0.6	0.6	1.6	1.2
Major teaching	0.5	0.5	1.7	1.3
Other teaching	0.5	0.5	0.9	0.9
Nonteaching	0.6	0.6	1.1	1.0
DSH percentage				
Below median	0.6	0.6	1.2	1.2
Above median	0.5	0.5	1.2	0.9
Number of beds				
Less than 50	1.5	1.4	2.2	2.0
50–100	1.1	1.1	1.8	1.7
101–250	0.6	0.6	1.2	1.1
251–500	0.5	0.5	1.0	0.8
More than 500	0.4	0.4	1.1	0.9

Note: APC (ambulatory payment classification), E&M (evaluation and management), DSH (disproportionate share). The APCs in Group 1 and Group 2 are listed in online-only Appendix 2-A, available at http://www.medpac.gov.

Source: MedPAC analysis of 100 percent Standard Analytic Claims File from 2010 and hospital cost reports from 2010.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

TABLE 2–8

Reduction in Medicare outpatient revenue from aligning payment rates across settings for selected ambulatory services (APCs in Groups 1 and 2 and E&M visits)

	Percent loss of Medicare outpatient revenue			
	Group 1 and Group 2		Group 1 and Group 2, with E&M visits	
	Without stop-loss	With stop-loss	Without stop-loss	With stop-loss
All hospitals	2.7%	2.6%	5.4%	4.8%
Percent loss in revenue at:				
10th percentile	0.8	0.8	1.3	1.3
90th percentile	5.8	5.7	10.1	8.5
Urban	2.5	2.5	5.3	4.6
Rural	3.4	3.4	6.2	5.7
Nonprofit	2.6	2.6	5.4	4.9
For profit	2.7	2.7	3.7	3.6
Government	2.9	2.9	7.2	5.5
Major teaching	2.9	2.8	8.9	6.9
Other teaching	2.4	2.4	4.6	4.2
Nonteaching	2.8	2.7	4.6	4.2
DSH percentage				
Below median	2.7	2.7	5.0	5.0
Above median	2.6	2.6	5.9	4.6
Number of beds				
Less than 50	4.6	4.4	6.9	6.1
50–100	3.8	3.7	6.6	6.0
101–250	2.8	2.8	5.2	4.8
251–500	2.2	2.2	4.7	4.1
More than 500	2.4	2.4	6.2	5.1

Note: APC (ambulatory payment classification), E&M (evaluation and management), DSH (disproportionate share). The APCs in Group 1 and Group 2 are listed in online-only Appendix 2-A, available at http://www.medpac.gov.

Source: MedPAC analysis of 100 percent Standard Analytic Claims File from 2010 and hospital cost reports from 2010.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

changes. For example, the copayment for APC 209 is $269 (33 percent of the payment rate). To equalize payment rates across settings for this APC, the OPPS rate would decline from $806 to $528. To maintain the copayment's current percentage of the payment rate, it would decrease to $176. Under this approach, the Medicare program would save $710 million and beneficiaries would save $190 million.

A third option is to adjust the copayments in each APC so that they are 20 percent of the payment rate after the payment rate changes. This approach would maximize beneficiary savings; the Medicare program would save $520 million and beneficiaries would save $380 million.

Impact on hospitals' Medicare revenue

For all OPPS hospitals (excluding CAHs), changing the payment rates for the 66 APCs in Group 1 and Group 2 would reduce their overall Medicare revenue—which includes hospitals' Medicare revenue for all service lines (e.g., inpatient, outpatient, post-acute care)—by 0.6 percent and Medicare OPD revenue by 2.7 percent (Table 2-7 and Table 2-8). These revenue decreases would cause the overall Medicare and hospital outpatient margins to decrease. The effect of this policy would vary widely among hospitals. Ten percent of hospitals would lose 0.1 percent or less of overall Medicare revenue, and 10 percent would lose at least 1.7 percent of Medicare revenue (Table 2-7). The impact would differ for rural and urban hospitals: Rural hospitals would lose 0.9 percent of aggregate Medicare revenue, while urban hospitals would lose 0.5 percent. Rural hospitals would lose more revenue than urban hospitals because rural hospitals receive a larger share of their overall Medicare revenue from outpatient care than do urban hospitals (28 percent vs. 20 percent). Hospitals that receive a large share of their

TABLE 2–9

Hospitals with largest reduction in overall Medicare revenue from aligning payment rates across settings for APCs in Group 1 and Group 2

Variable	100 hospitals with largest reduction in Medicare revenue	All other hospitals
Average loss (overall Medicare revenue)	4.1%	0.5%
Median DSH percentage among hospitals in category	14.0	25.8
Percent:		
Major teaching	4.0	8.2
Rural	29.0	28.9
Nonprofit	41.0	59.8
For profit	57.0	23.1
Government	2.0	17.0
Average number of beds	44	198
Number of specialty hospitals	53	N/A

Note: APC (ambulatory payment classification), DSH (disproportionate share), N/A (not available). The "All other hospitals" category includes all the hospitals subject to the inpatient prospective payment system minus those in the "100 hospitals with largest reduction in Medicare revenue" category. For the "All other hospitals" category, we were unable to calculate the number of specialty hospitals. The APCs in Group 1 and Group 2 are listed in Appendix 2-A, available at http://www.medpac.gov.

Source: MedPAC analysis of 100 percent Standard Analytic Claims File from 2010 and hospital cost reports from 2010.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 11, 2013

overall Medicare revenue through outpatient care would be disproportionately affected by policies that reduce OPPS payment rates. The revenue impact varies little by hospital ownership or teaching status. Hospitals with a DSH percentage below the median would have a similar revenue loss as hospitals with a DSH percentage above the median. There is an inverse relationship between revenue loss and hospital size as measured by number of beds. On average, relatively small hospitals would lose a higher percentage of their revenue than larger hospitals. This difference reflects in part the fact that smaller hospitals provide a higher share of outpatient care. We were not able to estimate the impact of this policy on hospitals with and without off-campus OPDs because there is no data source that indicates whether an OPD is located on or off campus.

We also examined the characteristics of the 100 hospitals (about 3 percent of all hospitals) that would have the largest percent reductions in overall Medicare revenue from changing OPPS payment rates for APCs in Group 1 and Group 2 (Table 2-9). We found the following differences between the 100 hospitals that would be most affected and all other hospitals:

- On average, the 100 most affected hospitals are smaller than other hospitals. They have an average of 44 beds, while the average among all other hospitals is 198 beds.
- The 100 most affected hospitals are less likely to serve low-income patients—the median DSH percentage is 14.0 percent for these hospitals versus 25.8 percent among all other hospitals.
- The 100 most affected hospitals are less likely to have major teaching status than all other hospitals.
- Over half of the 100 most affected hospitals are specialty hospitals.

The high proportion of specialty hospitals helps explain why the 100 most affected hospitals, on average, have fewer beds and a smaller share of Medicare outpatient revenue from ED visits. Specialty hospitals tend to have relatively few beds and are less likely to have EDs than other hospitals (Medicare Payment Advisory Commission 2005). In addition, 43 of the 100 most affected hospitals are specialty hospitals that focus on orthopedic or surgical cases. Orthopedic and surgical hospitals tend to concentrate on outpatient services (Medicare Payment Advisory Commission 2006).

We also estimated the combined effect on hospital-level Medicare revenue of adjusting OPPS payment rates for APCs in Group 1 and Group 2 and equalizing payment rates for E&M office visits between settings. For all OPPS hospitals, overall Medicare revenue would decline by 1.2 percent, and OPD revenue would decline by 5.4 percent

(Table 2-7, p. 42, and Table 2-8, p. 43). These combined policies would reduce program spending and beneficiary cost sharing by about $1.8 billion per year. Depending on how cost-sharing changes would be implemented, these policies would save beneficiaries between $330 million and $570 million per year.

The effect of these policies would vary widely among hospitals. Ten percent of hospitals would lose 0.2 percent of overall Medicare revenue or less, and 10 percent would lose at least 2.8 percent (Table 2-7, p. 42). The impact of these policies would differ by type of hospital. Rural hospitals would lose 1.7 percent of their overall Medicare revenue, while urban hospitals would lose 1.1 percent. Government-owned hospitals would lose more revenue than nonprofit or for-profit hospitals. Major teaching hospitals would lose more revenue than nonteaching hospitals (1.7 percent vs. 1.1 percent). There is little difference between the revenue loss for hospitals with a DSH percentage below the median and those with a DSH percentage above the median. As with the impact of changing OPPS payment rates for APCs in Group 1 and Group 2 alone, small hospitals, on average, would lose a larger percentage of their revenue than large hospitals. This difference reflects the fact that smaller hospitals provide a higher share of outpatient care.

Limiting Medicare revenue losses for hospitals that serve a large share of low-income patients

Some hospitals that are a primary source of access to physician services for low-income patients might experience significant reductions in Medicare revenue as a result of the policies discussed in this chapter, which could potentially reduce access for these patients. Therefore, policymakers may wish to consider a stop-loss policy that would limit the loss of Medicare revenue for these hospitals. There are several issues to consider in designing such a policy.

First, what criteria should Medicare use in determining which hospitals should be eligible for a stop-loss policy? One option is to base eligibility on a hospital's DSH percentage, which is the sum of the percentage of Medicare inpatient days for patients who are eligible for Supplemental Security Income (SSI) and the percentage of total inpatient days for patients on Medicaid. When the Commission recommended that payment rates should be equal whether an E&M office visit is provided in an OPD or in a freestanding office, we recommended that a stop-loss policy should apply to hospitals with a DSH percentage that is at or above the median for all hospitals (Medicare Payment Advisory Commission 2012c). However, the DSH percentage is based on inpatient days, and the policies discussed in this chapter would affect outpatient revenue but not inpatient revenue. In addition, the DSH percentage is partly based on the share of inpatient days for Medicaid patients, which may be unrelated to a hospital's share of low-income Medicare patients. If the primary purpose of a stop-loss policy is to protect access to ambulatory services for low-income Medicare patients, perhaps the policy should be linked to the proportion of Medicare patients treated in an OPD who receive SSI.

Second, where should the eligibility threshold be set for a stop-loss policy? For example, the policy could apply to hospitals whose share of low-income patients is at or above the median for all hospitals, at or above the top quartile, or at or above the top decile. The level of the threshold influences how many hospitals would be eligible for a stop-loss policy.

Third, how much Medicare revenue should a stop-loss policy protect? For example, should overall Medicare revenue losses for eligible hospitals be limited to 1 percent, 2 percent, or a higher amount? As the level of revenue protection increases, the amount of savings for the program and beneficiaries from the policies discussed in this chapter will decline.

Fourth, should the stop-loss policy be temporary or permanent? With regard to equalizing payment rates across settings for E&M office visits, the Commission recommended a temporary stop-loss policy that would last for three years. This three-year period would coincide with a three-year phase-in of lower OPPS payment rates for E&M services. It would also give the Secretary time to examine whether equalizing payment rates for E&M visits would impair access for low-income patients to ambulatory services and to develop targeted policies, if necessary, to protect access. Although a permanent stop-loss policy would provide long-term protection for hospitals that serve a high share of low-income patients, it would require CMS to annually determine which hospitals would be eligible for the policy and calculate the amount of money to be returned to each eligible hospital at the end of the year based on the stop-loss level. By contrast, a temporary policy would increase the amount of long-term savings for the program and beneficiaries and would give the Secretary time to develop targeted policies to protect access to care.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

There is also a concern that reducing Medicare revenue to hospitals that provide outpatient services to a disproportionate share of beneficiaries who are frail and in poor health could adversely affect access to physician services for these patients. Because low-income beneficiaries are more likely to be in poor health, protecting access for low-income patients should also help ensure access for patients who are sicker. According to the Medicare Current Beneficiary Survey, dual-eligible beneficiaries, who have much lower incomes than other Medicare beneficiaries, are more likely to report poor health status: 18 percent of the dual-eligible population reports being in poor health compared with 7 percent of other beneficiaries (Medicare Payment Advisory Commission 2012a).[17] In addition, dual-eligible beneficiaries have more chronic conditions and cognitive and functional limitations than other beneficiaries (Jacobson et al. 2012). For example, 58 percent of dual-eligible beneficiaries have a cognitive or mental impairment compared with 25 percent of other beneficiaries.

For the purpose of this chapter, we illustrate a stop-loss policy based on the Commission's recommended stop-loss policy associated with our 2012 recommendation to equalize payment rates across settings for E&M office visits (Medicare Payment Advisory Commission 2012c). In this illustration, revenue losses would be limited to 2 percent of overall Medicare revenue for hospitals with a DSH percentage at or above the median for all hospitals. This illustrative stop-loss policy would have a small effect on the overall Medicare and outpatient Medicare revenue changes that would result from adjusting OPPS payment rates for APCs in Group 1 and Group 2 (Table 2-7, p. 42, and Table 2-8, p. 43). This illustrative policy would reduce overall savings in one year by about $10 million, and only 2 percent of hospitals would have their overall revenue losses capped. The effect would be small because many of the hospitals with the highest revenue losses under this policy are less likely to serve low-income patients.

When we apply the illustrative stop-loss policy to a combined policy of adjusting OPPS payment rates for APCs in Group 1 and Group 2 and equalizing payment rates for E&M office visits between settings, the impact of the stop-loss policy on Medicare revenue changes is much larger (Table 2-7, p. 42, and Table 2-8, p. 43). About 7 percent of hospitals would have their overall Medicare revenue losses capped at 2 percent, which would reduce aggregate savings from the combined policy by $210 million each year. The types of hospitals that would benefit the most from the stop-loss policy would be government-owned and major teaching hospitals (Table 2-7, p. 42).

Impact on rural hospitals and beneficiaries

Under the policies described in this chapter for aligning payment rates between settings, rural hospitals would lose more overall Medicare revenue than urban hospitals (e.g., see Table 2-7, p. 42). This impact raises the question of whether rural beneficiaries would have access problems. About 60 percent of rural hospitals are CAHs, which would not be affected by these policies. Nevertheless, if policymakers determine that a mitigation policy is needed to prevent access problems for rural beneficiaries, they should target such a policy to rural hospitals that are uniquely essential for maintaining access to care in a given community, rather than all rural hospitals. Such a mitigation policy should be consistent with three principles developed by the Commission for our June 2012 report to guide special payments to rural providers:

- Payments should be targeted to low-volume isolated providers—that is, providers that have low patient volume and are at a distance from other providers.
- The magnitude of the special rural payment should be empirically justified: Payments should increase to the extent that factors beyond the providers' control increase their costs.
- Rural payment adjustments should encourage cost control on the part of providers (Medicare Payment Advisory Commission 2012b).

Aligning payment rates between OPDs and physicians' offices for cardiac imaging services

Instead of aligning payment rates between OPDs and freestanding offices for all of the 66 APCs that meet the criteria for Group 1 or Group 2, an alternative policy would target only the 3 APCs in Group 1 or Group 2 that include cardiac imaging services (echocardiograms and nuclear cardiology). The rationale for focusing on cardiac imaging is that these services have been migrating from freestanding offices to OPDs, where the payment rates are substantially higher (Table 2-2, p. 33). An important factor driving this migration is the rapid growth in hospitals' employment of cardiologists (Burling 2012, Ostrom

EMBARGOED FOR RELEASE UNTIL 1:00 PM JUNE 14, 2013

2012). According to a survey conducted by the American College of Cardiology, the share of cardiologists who are employed by hospitals tripled between 2007 and 2012, from 11 percent to 35 percent (American College of Cardiology 2012). In Washington State, for example, the share of cardiologists employed by hospitals grew between 2007 and 2012 from 2 percent to 42 percent (Ostrom 2012).

The shift in volume toward OPDs is consistent with the financial incentives in Medicare's payment systems:

- The payment rate for a level II echocardiogram without contrast (APC 269) is 141 percent higher in OPDs than in physicians' offices.
- The payment rate for a level III echocardiogram without contrast (APC 270) is 47 percent higher in OPDs than in physicians' offices, even after adjusting for differences in packaging.
- The payment rate for level II cardiac imaging (APC 377) is 19 percent higher in OPDs than in physicians' offices, even after adjusting for differences in packaging.

We estimate that aligning payment rates between OPDs and freestanding offices for these three cardiac APCs (APCs 269, 270, and 377) would reduce program spending and beneficiary cost sharing by a total of $500 million in one year.[18] Like the policy of aligning payment rates for APCs in Group 1 and Group 2 between settings, there are three options for distributing savings between the program and beneficiaries. However, beneficiaries would save about $100 million under each option. The reason there is so little difference among the options is that most of the savings comes from APCs that currently have copayments that are 20 percent of the OPPS payment rate. Of the three APCs in this analysis, only APC 270 has a copayment above the 20 percent threshold, and this APC represents only 5 percent of the total savings from this policy.

We estimated the effect on hospital-level Medicare revenue of adjusting OPPS payment rates for the three cardiac imaging APCs. For all OPPS hospitals (which excludes CAHs), overall Medicare revenue would decline by 0.3 percent, while OPD revenue would decline by 1.5 percent (Table 2-10, p. 48, and Table 2-11, p. 49). The impact of these policies varies little for most types of hospitals. One exception is rural hospitals, which would lose 0.5 percent of their overall Medicare revenue, compared with 0.3 percent for urban hospitals. Another exception is smaller hospitals (as measured by number of beds), which would lose a larger share of revenue than larger hospitals because they tend to be more focused on outpatient services.

We also examined the characteristics of the 100 hospitals that would have the largest percentage reduction in overall Medicare revenue from reducing OPPS payment rates for cardiac imaging APCs (Table 2-12, p. 49). We found the following differences between the 100 most affected hospitals and all other hospitals:

- On average, the 100 most affected hospitals are smaller than all other hospitals—they have an average of 69 beds, whereas all other hospitals have an average of 197.
- The 100 most affected hospitals are less likely to serve low-income patients—the median DSH percentage is 21.6 percent for these hospitals versus 25.7 percent for all other hospitals.
- Compared with all other hospitals, a higher proportion of the 100 most affected hospitals are rural and nonprofit.
- Only 1 of the 100 most affected hospitals has major teaching status, compared with 8.3 percent for all other hospitals.
- Only 6 of the 100 most affected hospitals are specialty hospitals. This small number is not surprising because cardiac specialty hospitals—the type of specialty hospital most likely to be affected by changes to payment rates for cardiac imaging services—have a strong focus on inpatient services (Medicare Payment Advisory Commission 2006). They also get a relatively small share of their Medicare OPD revenue from the three cardiac imaging APCs.

We also estimated the effect on hospital-level Medicare revenue of reducing OPPS payment rates for the three cardiac imaging APCs and equalizing payment rates for E&M visits across settings. These combined policies would reduce program spending and beneficiary cost sharing by about $1.4 billion per year. They would save beneficiaries almost $300 million per year. The impact of these policies would differ by type of hospital (Table 2-10, p. 48, and Table 2-11, p. 49).

EMBARGOED FOR RELEASE UNTIL 1 PM JUNE 14, 2013

TABLE 2–10

Reduction in overall Medicare revenue from aligning payment rates across settings for selected ambulatory services (cardiac imaging APCs and E&M visits)

	Percent loss of overall Medicare revenue			
	Cardiac imaging		Cardiac imaging, with E&M visits	
	Without stop-loss	With stop-loss	Without stop-loss	With stop-loss
All hospitals	0.3%	0.3%	0.9%	0.8%
Percent loss in revenue at:				
10th percentile	0.0	0.0	0.1	0.1
90th percentile	0.9	0.9	1.9	1.9
Urban	0.3	0.3	0.9	0.8
Rural	0.5	0.5	1.3	1.2
Nonprofit	0.3	0.3	0.9	0.8
For profit	0.3	0.3	0.5	0.5
Government	0.3	0.3	1.3	1.0
Major teaching	0.3	0.3	1.4	1.1
Other teaching	0.3	0.3	0.7	0.7
Nonteaching	0.4	0.4	0.8	0.7
DSH percentage				
Below median	0.4	0.4	0.9	0.9
Above median	0.3	0.3	0.9	0.8
Number of beds				
Less than 50	0.5	0.5	1.2	1.1
50–100	0.6	0.6	1.4	1.3
101–250	0.3	0.3	0.9	0.8
251–500	0.3	0.3	0.8	0.7
More than 500	0.3	0.3	1.0	0.8

Note: APC (ambulatory payment classification), E&M (evaluation and management), DSH (disproportionate share). The APCs included in cardiac imaging are 269, 270, and 377.

Source: MedPAC analysis of 100 percent Standard Analytic Claims File from 2010 and hospital cost reports from 2010.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Equalizing payment rates between OPDs and ASCs for certain ambulatory procedures

An alternative to aligning payment rates between OPDs and freestanding offices for the APCs in Group 1 and Group 2 would be to equalize payment rates for certain ambulatory surgical procedures between OPDs and ASCs. The relative weights for most procedures in the ASC payment system are based on the relative weights in the OPPS, but the ASC system uses a lower conversion factor (average payment amount).[19] Therefore, payment rates for all procedures are much higher in the OPPS—for 2013, the Medicare rates for most services are 78 percent higher in OPDs than in ASCs. Beneficiary cost sharing is also much greater in OPDs than in ASCs. The gap in payment rates between the two settings has increased over time, which has influenced some ASC owners to sell their facilities to hospitals and some health care systems to expand their OPDs rather than establish new ASCs (North Carolina Department of Health and Human Services 2008, State of Connecticut 2011). In addition, the migration of procedures from OPDs to ASCs from 2006 to 2010 appears to have stalled, perhaps because of higher payment rates in OPDs (Medicare Payment Advisory Commission 2013). From 2006 through 2010, the number of ASC-covered procedures per fee-for-service beneficiary grew by 5.8 percent per year in ASCs and by 0.1 percent per year in OPDs. In 2011, however, procedures increased at a slower rate in ASCs than in OPDs (1.8 percent vs. 3.8 percent). This change could signal the beginning of a movement of procedures from ASCs to OPDs.

We used the following three criteria to select services for which payment rates could be equalized between OPDs and ASCs:

TABLE 2–11

Reduction in Medicare outpatient revenue from aligning payment rates across settings for selected ambulatory services (cardiac imaging APCs and E&M visits)

	Percent loss of Medicare outpatient revenue			
	Cardiac imaging		Cardiac imaging, with E&M visits	
	Without stop-loss	With stop-loss	Without stop-loss	With stop-loss
All hospitals	1.5%	1.5%	4.3%	3.8%
Percent loss in revenue at:				
10th percentile	0.2	0.2	0.6	0.6
90th percentile	3.3	3.3	7.3	6.5
Urban	1.4	1.4	4.2	3.7
Rural	1.9	1.9	4.6	4.3
Nonprofit	1.5	1.5	4.3	4.0
For profit	1.3	1.3	2.3	2.3
Government	1.4	1.4	5.8	4.6
Major teaching	1.4	1.3	7.4	6.1
Other teaching	1.5	1.5	3.7	3.4
Nonteaching	1.5	1.5	3.3	3.1
DSH percentage				
Below median	1.5	1.5	3.8	3.8
Above median	1.4	1.4	4.7	3.8
Number of beds				
Less than 50	1.6	1.5	3.9	3.4
50–100	2.1	2.1	4.8	4.5
101–250	1.5	1.5	3.9	3.6
251–500	1.3	1.3	3.9	3.5
More than 500	1.4	1.4	5.2	4.5

Note: APC (ambulatory payment classification), E&M (evaluation and management), DSH (disproportionate share). The APCs included in cardiac imaging are 269, 270, and 377.

Source: MedPAC analysis of 100 percent Standard Analytic Claims File from 2010 and hospital cost reports from 2010.

TABLE 2–12

Hospitals with largest reduction in overall Medicare revenue from aligning payment rates across settings for cardiac imaging APCs

Variable	100 hospitals with largest reduction in Medicare revenue	All other hospitals
Average loss (overall Medicare revenue)	1.6%	0.3%
Median DSH percentage among hospitals in category	21.6	25.7
Percent:		
Major teaching	1.0	8.3
Rural	58.0	27.9
Nonprofit	67.0	59.0
For profit	18.0	24.4
Government	15.0	16.6
Average number of beds	69	197
Number of specialty hospitals	6	N/A

Note: APC (ambulatory payment classification), DSH (disproportionate share), N/A (not available). The "All other hospitals" category includes all the hospitals subject to the inpatient prospective payment system minus those in the "100 hospitals with largest reduction in Medicare revenue" category. For the "All other hospitals" category, we were unable to calculate the number of specialty hospitals. The APCs included in cardiac imaging are 269, 270, and 377.

Source: MedPAC analysis of 100 percent Standard Analytic Claims File from 2010 and hospital cost reports from 2010.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

TABLE 2–13

Reduction in OPD payments from equalizing payment rates across settings for 12 APCs commonly performed in ASCs

APC	APC description	Reduction in payments (in millions)
137	Level V skin repair	$26.5
203*	Level IV nerve injections	13.2
207*	Level III nerve injections	147.5
233	Level II anterior segment eye procedures	3.9
234	Level III anterior segment eye procedures	9.9
239*	Level II repair and plastic eye procedures	1.3
240	Level III repair and plastic eye procedures	16.4
241	Level IV repair and plastic eye procedures	5.2
244	Corneal and amniotic membrane transplant	9.5
245	Level I cataract procedures without IOL insertion	0.2
246	Cataract procedures with IOL insertion	341.2
247	Laser eye procedures	13.6
Total		588.4

Note: OPD (hospital outpatient department), APC (ambulatory payment classification), ASC (ambulatory surgical center), IOL (intraocular lens).
*These APCs also appear in Group 2. See online-only Appendix 2-A for the full list of APCs in Group 2, available at http://www.medpac.gov.

Source: MedPAC analysis of 100 percent Standard Analytic Claims File from 2010.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14 2013

- services that are frequently performed in ASCs (more than 50 percent of the time), which indicates that they are likely safe and appropriate to provide in an ASC and the ASC payment amounts are sufficient to ensure beneficiaries' access;
- services that are infrequently provided with an ED visit when furnished in an OPD (such services are unlikely to have costs that are directly associated with operating an ED); and
- services for which patient severity is no greater in OPDs than in ASCs.

We also used these criteria to select services for which payment rates could be aligned between OPDs and freestanding offices (APCs in Group 1 and Group 2). However, we used two additional criteria to select services for Group 1 and Group 2 that do not apply to ASC services: the extent of packaging differences across payment systems and the presence of 90-day global surgical codes in an APC. Because the ASC payment system and the OPPS use the same rules for packaging ancillary services and supplies with a primary procedure, the unit of payment is the same in both settings. In addition, neither payment system uses 90-day global surgical codes. To select services for which payment rates could be made equal in OPDs and ASCs, we measured the share of ambulatory surgical procedures performed in ASCs and the frequency with which OPD services are provided with an ED visit; we also examined patient severity differences between settings. We used the same method for these analyses that we used to identify APCs for Group 1 and Group 2 (see p. 38). This policy would not apply to CAHs because these entities are not paid under the OPPS.

We identified 12 APCs that met the three criteria for making payment rates equal between OPDs and ASCs (Table 2-13).[20] These APCs included nine eye procedure groups, two nerve injection groups, and one skin repair group. Three of these 12 APCs also appeared in Group 2 (none appeared in Group 1).[21] If policymakers were to adopt the criteria for aligning payment rates between OPDs and physicians' offices along with the criteria for aligning payment rates between OPDs and ASCs, they would have to decide whether to use the physician's office or ASC payment rate as the basis for determining OPD rates for APCs that meet both sets of criteria. In these cases, the payment rate could be based on the ambulatory setting with the highest volume.

To equalize payment rates between OPDs and ASCs, we calculated a revised OPPS rate for each APC based on

TABLE 2–14 **Reduction in overall Medicare revenue from equalizing payment rates across settings for selected services (12 APCs commonly performed in ASCs and E&M visits)**

	Percent loss of overall Medicare revenue			
	12 APCs		12 APCs, with E&M visits	
	Without stop-loss	With stop-loss	Without stop-loss	With stop-loss
All hospitals	0.4%	0.4%	1.0%	0.9%
Percent loss in revenue at:				
10th percentile	0.0	0.0	0.1	0.1
90th percentile	1.4	1.4	2.7	2.0
Urban	0.3	0.3	0.9	0.8
Rural	0.7	0.6	1.4	1.3
Nonprofit	0.4	0.3	0.9	0.9
For profit	0.4	0.4	0.6	0.6
Government	0.4	0.4	1.4	1.1
Major teaching	0.3	0.3	1.4	1.2
Other teaching	0.3	0.3	0.7	0.7
Nonteaching	0.5	0.5	0.9	0.8
DSH percentage				
Below median	0.4	0.4	0.9	0.9
Above median	0.3	0.3	1.0	0.8
Number of beds				
Less than 50	1.6	1.5	2.4	2.1
50–100	0.7	0.7	1.5	1.4
101–250	0.4	0.4	0.9	0.9
251–500	0.3	0.3	0.8	0.7
More than 500	0.2	0.2	0.9	0.8

Note: APC (ambulatory payment classification), ASC (ambulatory surgical center), E&M (evaluation and management), DSH (disproportionate share). The 12 APCs are listed in Table 2-13.

Source: MedPAC analysis of 100 percent Standard Analytic Claims File from 2010 and hospital cost reports from 2010.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

an average of the ASC rates for the CPT codes in that APC. For a more detailed discussion of our method, see Appendix 2-B, available online at http://www.medpac.gov. Our approach would not affect how OPPS relative weights are calculated; they would continue to be based on the median OPD cost of the services in each APC.

Effects of equalizing payment rates between OPDs and ASCs for selected services

We estimate that equalizing payment rates between OPDs and ASCs for these 12 APCs would reduce program spending and beneficiary cost sharing by a total of about $590 million in one year. As with Group 1 and Group 2 of the prior analysis, there are three options for how to distribute savings among the program and beneficiaries. The amount of beneficiary savings varies widely among the options, ranging from $40 million to $220 million, because 70 percent of the savings would come from APCs that currently have copayments above the 20 percent level, such as APC 207 (level III nerve injections) and APC 246 (cataract procedures with intraocular lens insertion).

Across all hospitals, equalizing payment rates between settings for these 12 APCs would reduce their overall Medicare revenue by 0.4 percent and OPD revenue by 1.7 percent (Table 2-14 and Table 2-15, p. 52). The effect of these policies would vary among some types of hospitals. Ten percent of hospitals would lose no overall Medicare revenue, but 10 percent would lose at least 1.4 percent of Medicare revenue (Table 2-14). Rural hospitals would lose 0.7 percent of their overall Medicare revenue, while urban hospitals would lose 0.3 percent. Nonteaching hospitals would have slightly larger losses than major teaching and other teaching hospitals. Hospitals that have DSH

TABLE 2–15

Reduction in Medicare outpatient revenue from equalizing payment rates across settings for selected services (12 APCs commonly performed in ASCs and E&M visits)

	Percent loss of Medicare outpatient revenue			
	12 APCs		12 APCs, with E&M visits	
	Without stop-loss	With stop-loss	Without stop-loss	With stop-loss
All hospitals	1.7%	1.7%	4.5%	4.0%
Percent loss in revenue at:				
10th percentile	0.0	0.0	0.3	0.3
90th percentile	5.1	5.1	9.5	8.2
Urban	1.6	1.6	4.4	3.9
Rural	2.4	2.3	5.1	4.7
Nonprofit	1.7	1.6	4.4	4.0
For profit	2.0	2.0	3.0	2.9
Government	1.8	1.8	6.1	4.8
Major teaching	1.7	1.6	7.7	6.3
Other teaching	1.4	1.4	3.6	3.3
Nonteaching	2.0	2.0	3.8	3.5
DSH percentage				
Below median	1.8	1.8	4.1	4.1
Above median	1.7	1.6	4.9	4.0
Number of beds				
Less than 50	5.1	4.6	7.3	6.4
50–100	2.5	2.4	5.2	4.8
101–250	1.8	1.8	4.2	3.9
251–500	1.4	1.4	3.9	3.5
More than 500	1.2	1.2	5.0	4.3

Note: APC (ambulatory payment classification), ASC (ambulatory surgical center), E&M (evaluation and management), DSH (disproportionate share). The 12 APCs are listed in Table 2-13.

Source: MedPAC analysis of 100 percent Standard Analytic Claims File from 2010 and hospital cost reports from 2010.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

percentages below the median would have slightly larger losses than other hospitals, suggesting that there would be a slightly smaller effect on hospitals that serve low-income patients. Smaller hospitals (as measured by number of beds) would lose a larger share of revenue than larger hospitals in part because smaller hospitals tend to focus on outpatient care.

We also examined the characteristics of the 100 hospitals that would have the largest percentage reduction in overall Medicare revenue from equalizing payment rates between OPDs and ASCs for these 12 APCs (Table 2-16). We found the following differences between the 100 hospitals that would be most affected and all other hospitals:

- On average, the 100 most affected hospitals are much smaller than the average hospital— they have an average of 32 beds, whereas the average among all other hospitals is 198.
- The 100 most affected hospitals are much less likely to serve low-income patients—the median DSH percentage is 10.7 percent for those hospitals versus 25.8 percent for all other hospitals.
- Compared with all other hospitals, a higher proportion of the 100 most affected hospitals are rural, but a smaller share are nonprofit or have major teaching status.
- Of the 100 most affected hospitals, 61 are specialty hospitals, and 53 of the specialty hospitals focus on orthopedics or surgery. Specialty hospitals tend to focus on outpatient care (except for cardiac hospitals), have very few beds and low DSH percentages, and are unlikely to be teaching hospitals.

TABLE 2–16

Hospitals with largest reduction in overall Medicare revenue from equalizing payment rates between OPDs and ASCs for 12 APCs

Variable	100 hospitals with largest reduction in Medicare revenue	All other hospitals
Average loss (overall Medicare revenue)	6.8%	0.3%
Median DSH percentage among hospitals in category	10.7	25.8
Percent:		
Major teaching	5.0	8.2
Rural	32.0	28.9
Nonprofit	33.0	60.1
For profit	59.0	23.1
Government	8.0	16.8
Average number of beds	32	198
Number of specialty hospitals	61	N/A

Note: OPD (hospital outpatient department), ASC (ambulatory surgical center), APC (ambulatory payment classification), DSH (disproportionate share), N/A (not available). The "All other hospitals" category includes all hospitals subject to the inpatient prospective payment system minus those in the "100 hospitals with largest reduction in Medicare revenue" category. For the "All other hospitals" category, we were unable to calculate the number of specialty hospitals. The 12 APCs are listed in Table 2-13.

Source: MedPAC analysis of 100 percent Standard Analytic Claims File from 2010 and hospital cost reports from 2010.

We also estimated the combined effect on hospital-level Medicare revenue of equalizing payment rates between OPDs and ASCs for 12 APCs and equalizing payment rates for E&M visits between OPDs and freestanding offices. These combined policies would reduce program spending and beneficiary cost sharing by about $1.5 billion per year. They would save beneficiaries between $230 million and $410 million per year.

Limiting Medicare revenue losses for hospitals that serve a large share of low-income patients

We illustrate the same stop-loss policy modeled earlier in the context of revising payment rates for APCs in Group 1 and Group 2: Revenue losses would be limited to 2 percent of overall Medicare revenue for hospitals with a DSH percentage at or above the median for all hospitals. This illustrative stop-loss policy would have very little impact on overall Medicare or outpatient Medicare revenue changes that result from equalizing rates between OPDs and ASCs for 12 APCs. The effect would be small because many of the hospitals with the highest revenue losses under this policy are much less likely to serve low-income patients.

However, when we apply the illustrative stop-loss policy to a combined policy of equalizing payment rates between OPDs and ASCs for 12 APCs and equalizing payment rates for E&M visits between OPDs and freestanding offices, the impact on Medicare revenue changes is larger (Table 2-14, p. 51, and Table 2-15). About 6.5 percent of hospitals would have their overall Medicare revenue losses capped at 2 percent, which would reduce aggregate savings (program spending plus beneficiary cost sharing) from the combined policy in one year by $160 million. The types of hospitals that would benefit the most from the stop-loss policy would be government-owned and major teaching hospitals. ■

EMBARGOED FOR RELEASE UNTIL 4:00PM JUNE 14, 2013

Endnotes

1 In 2011, Medicare paid 80 percent more for this service when provided in an OPD than in a physician's office. The payment gap is somewhat smaller in 2013 than in 2011 because the physician office rate increased slightly and the OPPS rate decreased slightly.

2 The payment rates in the physician fee schedule have three parts: physician's work, practice expense, and professional liability insurance. Of the three, only practice expense differs when a service is provided in an office versus a hospital-based facility. For further information, see the Commission's *Payment basics: Physician services payment system*, available at http://www.medpac.gov/documents/MedPAC_Payment_Basics_12_Physician.pdf.

3 A detailed description of the OPPS can be found at *Payment basics: Outpatient hospital services payment system*, available at http://www.medpac.gov/documents/MedPAC_Payment_Basics_12_OPD.pdf.

4 Almost all of the practitioners in this category are physicians (e.g., in 2011, 99 percent were physicians).

5 According to the survey, about 30 percent of cardiologists were employed by HMOs, government-owned providers, medical schools, and other organizations in 2012.

6 From 2010 to 2011, the total number of echocardiograms per fee-for-service beneficiary provided in offices and the OPDs of OPPS hospitals declined by 0.2 percent and the number of nuclear cardiology services declined by 4.7 percent. These services are included in the following ambulatory payment classification (APC) groups: level I echocardiograms (APC 697), level II echocardiograms (APC 269), level III echocardiograms (APC 270), level I cardiac imaging (APC 398), and level II cardiac imaging (APC 377).

7 We have not examined whether OPDs would have sufficient capacity to perform all ambulatory echocardiograms and nuclear cardiology tests.

8 The most obvious feature of standby capacity for a hospital is the emergency department. In the OPPS, CMS has established two broad categories of APCs for payment of ED visits, Type A and Type B. A Type A ED is an "organized hospital-based facility for the provision of unscheduled episodic services to patients who present for immediate medical attention. The facility must be available 24 hours a day." A Type B facility has less stringent criteria than a Type A facility, but it is available for emergency care on an urgent basis.

9 For example, CPT code 99213 is for visits that typically include 15 minutes of face-to-face time between the physician and patient, whereas CPT code 99214 is for visits that typically include 25 minutes of face-to-face time between the physician and patient and involve a more detailed history and examination. This coding structure is the same whether the visit is provided in a physician's office or in an OPD.

10 A hospital's DSH percentage is defined as the sum of two ratios: the share of Medicare patients on Supplemental Security Income plus the share of Medicaid days over all inpatient days. The Patient Protection and Affordable Care Act of 2010 (PPACA) will affect DSH payments in two ways starting in 2014. First, PPACA will expand the pool of DSH dollars by expanding Medicaid. Second, starting in 2014, 75 percent of that expanded pool of DSH dollars will be diverted to an uncompensated care pool of dollars that will either pay for uncompensated care or be considered savings to the Medicare trust fund. For every 1 percent decline in the rate of uninsurance among those under 65 years of age, the share of the uncompensated-care pool going to hospitals will decline by 1 percent and the share allocated to Medicare trust fund savings will increase by 1 percent. The end result is that 25 percent of DSH dollars will continue to be paid out through the regular formula, and up to 75 percent of DSH dollars will be allocated for uncompensated care costs and trust fund savings.

11 The relative weights for most procedures in the ASC payment system are based on the relative weights in the OPPS. Consequently, the adjustments to the OPPS rates discussed here could affect payments to ASCs.

12 The physician fee schedule payment for 90-day global surgical codes includes the surgical procedure itself and office visits that occur within a 90-day period after the procedure. CMS assumes that the physician's clinical staff spends additional time scheduling the procedure and coordinating presurgical services when the procedure is performed in a hospital than in a physician's office. Therefore, these services are assumed to have a higher cost when delivered in an OPD. However, we are unable to estimate the amount of this additional cost. Consequently, we excluded these procedures from the group of services that are candidates for equal payment rates across settings.

13 APCs are collections of services defined by CPT codes that are similar both clinically and in terms of resource costs.

14 To identify differences in payment rates between sectors, we used payment rates from 2010 and trended them to 2012 based on the update factors in each sector. We used volume data from 2010 to identify services that were predominantly

EMBARGOED FOR RELEASE UNTIL 10AM ET JUNE 14, 2013

provided in freestanding offices. Because many services have been migrating from freestanding offices to OPDs, we also examined volume data from 2008 to identify services where at least 50 percent of total volume occurred in offices in 2008 but not in 2010. However, we did not add any APCs to our list of services based on 2008 data.

15 We used 100 percent of Medicare claims from 2010 to maximize the number of cases. We used $p < 0.05$ and a two-tail test to determine statistical significance.

16 There are a few APCs in Group 2 for which the office rate is currently higher than the OPD rate. In these cases, the OPD rate could be increased to the level of the office rate plus the cost of additional packaging in the OPPS.

17 Eighty-six percent of dual-eligible beneficiaries have incomes below 150 percent of the federal poverty level, compared with 22 percent of other beneficiaries (Jacobson et al. 2012).

18 APC 269 is in Group 1. APC 270 and APC 377 are in Group 2. In 2011, these three APCs accounted for 14.5 percent of the volume of all cardiac APCs in the OPPS and 18.6 percent of the spending on all cardiac APCs in the OPPS.

19 CMS uses a different method to determine ASC payment rates for new, office-based procedures. The rates for these procedures are based on the lower of the ASC rate (based on the OPPS relative weight) or the PE portion of the PFS rate that applies when the service is furnished in a physician's office. Further information about the ASC payment system can be found online at http://www.medpac.gov/documents/MedPAC_Payment_Basics_12_ASC.pdf.

20 We excluded the volume of services provided in physicians' offices from this analysis. However, if we included physician office volume, the volume of 4 of the 12 APCs in this group would be higher in physicians' offices than in ASCs or OPDs. Three of these four APCs appear in Group 2. One of these four APCs (APC 247, laser eye procedures) does not appear in Group 1 or Group 2 because 90-day global surgical codes account for at least 90 percent of its volume.

21 The three APCs that also appear in Group 2 are 203 (level IV nerve injections), 207 (level III nerve injections), and 239 (level II repair and plastic eye procedures).

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

References

Alexander, A., K. Garloch, and D. Raynor. 2012. As doctors flock to hospitals, bills spike for patients. *Charlotte Observer*, December 17.

American College of Cardiology. 2012. Changing CV practice landscape: Findings from ACC Cardiovascular Practice Census. Presentation to the ACC Michigan Chapter, September.

Berenson, R. A., P. B. Ginsburg, J. B. Christianson, et al. 2012. The growing power of some providers to win steep payment increases from insurers suggests policy remedies may be needed. *Health Affairs* 31, no. 5 (May): 973–981.

Burling, S. 2012. Why heart doctors are leaving practice to work for hospitals. *Philadelphia Inquirer*, January 26.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2012. Measure information form collected for CMS efficiency measures (claims based) for Medicare spending per beneficiary (MSPB). http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228772057350.

Dutton, A. 2012. The cost of doctor buyouts: Charges rise, patient choice suffers, critics say. *Idaho Statesman*, October 28.

Ginsburg, P. B., Center for Studying Health System Change. 2011. Health care industry consolidation. Testimony before the Subcommittee on Health, Ways and Means Committee, U.S. House of Representatives. 112th Cong., 1st sess. September 9.

Jacobson, G., T. Neuman, and A. Damico. 2012. *Medicare's role for dual eligible beneficiaries*. Issue brief. Menlo Park, CA: Kaiser Family Foundation.

Jain, M. 2012. Doctors in private practices are now joining hospital staffs. *Washington Post*, March 12.

Kocher, R., and N. R. Sahni. 2011. Hospitals' race to employ physicians—The logic behind a money-losing proposition. *New England Journal of Medicine* 364, no. 19 (May 12): 1790–1793.

Kowalczyk, L. 2013a. A hospital fee, minus the hospital. *Boston Globe*, January 27.

Kowalczyk, L. 2013b. Hospital charges bring a backlash: Patients objecting; state adds scrutiny. *Boston Globe*, March 11.

Mathews, A. W. 2012. Same doctor visit, double the cost: Insurers say rates can surge after hospitals buy private physician practices; Medicare spending rises, too. *Wall Street Journal*, August 27.

Medicare Payment Advisory Commission. 2013. *Report to the Congress: Medicare payment policy.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2012a. *A data book: Health care spending and the Medicare program.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2012b. *Report to the Congress: Medicare and the health care delivery system.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2012c. *Report to the Congress: Medicare payment policy.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2006. *Report to the Congress: Physician-owned specialty hospitals revisited*. Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2005. *Report to the Congress: Physician-owned specialty hospitals*. Washington, DC: MedPAC.

North Carolina Department of Health and Human Services, Division of Health Service Regulation. 2008. Declaratory ruling to the Presbyterian Hospital and SameDay Surgery Center at Presbyterian Hospital, LLC.

O'Malley, A. S., A. M. Bond, and R. A. Berenson. 2011. *Hospital employment of physicians: better quality, higher costs?* Issue brief no. 136. Washington, DC: Center for Studying Health System Change.

Ostrom, C. M. 2012. Why you might pay twice for one visit to doctor. *Seattle Times*, November 3.

Schulte, F. 2012. Hospitals face increased scrutiny for charging facility fees. *Washington Post,* December 23.

State of Connecticut, Department of Public Health, Office of Health Care Access. 2011. Notice of final decision for an application for a certificate of need filed by Hartford Hospital & Constitution Eye Surgery Center, LLC. Change of ownership and control of Constitution Eye Surgery Center, LLC to Hartford Hospital. January 20.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

CHAPTER 3

Approaches to bundling payment for post-acute care

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

CHAPTER 3

Approaches to bundling payment for post-acute care

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Chapter summary

Under traditional fee-for-service (FFS) Medicare, the program pays widely varying rates for the care beneficiaries can receive following a hospital stay at one of four post-acute care (PAC) settings (skilled nursing facilities, home health care, inpatient rehabilitation hospitals, and long-term care hospitals). Nationwide, use rates for PAC services also vary widely for reasons not explained by differences in beneficiaries' health status, indicating that, in aggregate, fewer services could be furnished to Medicare beneficiaries without necessarily compromising patient outcomes. In recent years, the Commission has been concerned about Medicare spending and quality-of-care issues associated with hospital readmissions and hospital discharges to PAC providers. Bundled payments have the potential to improve care coordination and quality of services, rationalize service use, and lower potentially avoidable readmissions. In 2008, the Commission recommended that the Congress require the Secretary to create a pilot program to test the feasibility of bundled payment around a Medicare hospitalization for selected conditions. The Congress enacted this requirement in 2010, and in 2011 CMS launched a Bundled Payments for Care Improvement Initiative to test different bundle designs.

Under a bundled approach, one payment (or a benchmark price across multiple providers) would cover all services furnished across all settings and providers during a defined period of time such as 30 days or 90 days after a

In this chapter

- Introduction
- Illustration of how services could be bundled
- Setting the episode benchmark for the bundle
- Implications of bundled payments for beneficiaries
- Conclusion

triggering event. By tying a provider's payment to services furnished beyond "its four walls," bundled payments encourage accountability for cost and quality across a spectrum of care. In contrast to FFS, a provider has an incentive and the flexibility to coordinate care and provide only clinically necessary services. In principle, providers would not have an incentive to furnish more services to generate revenue; instead, they would deliver a mix of services that enable them to improve the quality of their care while keeping Medicare spending low. The scope and duration of the bundle and the incentives tied to payment would shape the financial pressures providers experience to change their current practice patterns.

This chapter discusses design aspects of a bundled payment and the advantages and disadvantages of possible approaches. Each decision involves trade-offs between increasing the opportunities for care coordination and requiring providers to accept financial and clinical risk for care beyond what they furnish themselves. To illustrate the trade-offs inherent in these design decisions, we selected a design consistent with the Commissioners' support for more- rather than less-inclusive bundles and one that does not require providers to have an infrastructure to make and receive payments for other providers. The illustrative bundle begins with an initial hospital stay; spans 90 days after discharge; and includes any potentially avoidable readmissions, PAC, and physician services furnished during the hospital stay and during any institutional PAC care (skilled nursing facilities, inpatient rehabilitation facilities, and long-term care hospitals). In this illustration, CMS would continue to pay providers FFS (perhaps minus a withheld amount) and retrospectively compare actual average spending for a condition with a benchmark spending amount. If the providers' "collective" average spending for the bundle is kept below the benchmark, CMS would return the withheld amount to the participating providers or share with them the "savings" realized between the benchmark amount and actual spending. Conversely, providers would be at some risk for spending above the benchmark. We use this illustration to begin a conversation about how best to proceed with this potential payment reform, acknowledging that many other designs are possible, with different strengths and weaknesses.

Regarding the scope of the services to be covered by a bundled payment, we note that having more services in the bundle offers more opportunities to coordinate care across settings compared with bundles that include fewer services but add more financial risk for providers. Because not all beneficiaries use PAC, even among conditions with relatively high PAC use, bundles could encourage providers to carefully consider whether beneficiaries would benefit from PAC. In this illustration, the spending benchmark includes episodes without PAC, thereby giving providers strong incentives to withhold PAC services entirely. Furthermore, the

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 11, 2013

wide variation in sites used and the payments associated with each underscores the potential savings opportunity of selecting PAC settings that match beneficiary care needs. Tying some portion of bundled payments to quality standards (through a withheld amount or a shared-risk approach) will be critical to ensuring that providers furnish the PAC required to meet beneficiaries' care needs.

Long bundles have the advantage of covering more services and increasing the amount of care for which providers are accountable and the incentive to coordinate it, but they put providers at more risk compared with short bundles. On the other hand, long bundles are also more likely to include care at the end of the bundle period that is unrelated to the initial hospitalization. However, spending and financial risk do not increase proportionally to the time frame spanned by the bundle. For example, a bundle that is triple the length of another bundle does not triple the spending it includes.

Bundle designs differ in the variation in spending across episodes and how much of the variation can be predicted. In general, broader bundles (longer and encompassing more services) encourage more care coordination but explain less of the variation in spending across episodes compared with more narrowly defined bundles (shorter and including fewer services). That said, we found that 90-day bundles that included the hospital stay, potentially avoidable readmissions, PAC care, and physician services furnished during the hospital and institutional PAC stays accounted for as much variation in resource use or spending as payment systems Medicare currently uses to pay hospitals and Medicare Advantage plans.

To pay providers, Medicare could pay one entity an all-inclusive payment to cover all services rendered during the bundle. This approach would place one entity in charge of the beneficiary's care and require the entity to make payments to other providers. Alternatively, Medicare could continue to pay individual providers under FFS. Because one entity would not receive the payment and be responsible for apportioning it to other providers, this approach sidesteps the many thorny issues associated with making a single payment that could undermine implementation. However, continuing to pay all providers separately could dampen the incentive for individual providers to change their patterns of care.

To encourage providers to keep their spending low, CMS could compare average spending for the bundles with a benchmark (set in advance for each condition and risk adjusted). Providers would collectively be at risk for spending above the benchmark and would benefit from keeping average spending below it. One approach would be to retain a small share of the FFS payment made to each provider and return the withheld amounts if providers keep their total average

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

episode spending below the benchmark. The program would keep the withheld amounts if average spending is above it. Alternatively, the difference between average spending and the benchmark could be shared with providers (or the losses split with providers). With larger risks and rewards at stake, a shared-risk approach—rather than withheld amounts—would create stronger incentives for providers to change behavior but could raise program payments for low-spending providers.

Medicare could consider specific design elements to counter the incentive to underfurnish care. For example, continuing to pay providers on an FFS basis would help ensure that providers continue to furnish services to meet beneficiaries' care needs. Placing providers collectively at risk for readmissions would encourage all providers to deliver the care needed to avoid these costly events. Comparing average spending (over many cases) with the benchmark would mean providers could furnish costly care when needed for individual cases and still keep average spending below the benchmark. Finally, Medicare could tie the return of the withheld payments of shared savings to providers' performance on certain quality metrics. Medicare will need to monitor the rates of hospital admissions for conditions covered under bundled payments. If they increase, CMS could consider an admission policy to penalize hospitals with unusually high rates of potentially avoidable admissions for those conditions covered by bundled payments.

Setting the spending benchmark will require a judgment about where in the current cost or spending distribution to set the level. Current FFS spending is not a good benchmark given the current incentives in FFS to furnish services of marginal value. Benchmarks could reflect lower PAC and readmission spending (both of which exhibit high variation) or spending in areas with relatively low resource use. The benchmarks will determine the changes required of providers to reduce their average spending, while the design of the withheld amounts or shared risk will shape providers' incentives for doing so.

For beneficiaries, payment bundles should result in fewer potentially avoidable hospital readmissions and improved transitions between settings. While preserving beneficiaries' freedom of choice of providers, providers could be allowed to encourage beneficiaries to use recommended providers and settings—for example by offering services beneficiaries may not currently receive, such as transitional care. In the future, the program may elect to reinforce beneficiary decisions about where they seek care by raising the minimum conditions of participation to exclude the poorest quality providers or by charging higher beneficiary cost-sharing amounts when a beneficiary chooses not to use recommended PAC settings or providers.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Bundled payments are one way to begin changing the delivery system away from the fragmented care that results from FFS and toward shared provider accountability that encourages care coordination and cost control during an episode of care. Bundled payments would give providers, especially those not ready or unable to participate in broader payment reforms (such as accountable care organizations), a way to gain experience in coordinating care that extends beyond their narrow purview and across a spectrum of providers and settings. In this way, bundling could help facilitate continued progress toward larger delivery system reforms. The specific design of bundles will shape the risk for providers and the opportunities for care coordination and better care for beneficiaries. Over the next year, the Commission plans to continue its conversation about how best to proceed with this payment reform. ■

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

Introduction

Beneficiaries enrolled in Medicare fee-for-service (FFS) who require posthospital care face a fragmented delivery system that does not facilitate smooth transitions between providers or encourage the appropriate use of services. FFS does not provide incentives for coordinated care, even though poorly executed transitions can put beneficiaries at risk for readmissions, which may represent poor-quality care and are costly to the program.

Under FFS, providers are not accountable for the total cost of services across an episode of care. Individual providers are not required or given an incentive to consider costs across other providers and settings in rendering care to beneficiaries. Indeed, furnishing more physician visits or using an additional post-acute care (PAC) setting generates more Medicare payments. Furthermore, under Medicare's separate payment systems, PAC providers—skilled nursing facilities (SNFs), home health agencies (HHAs), inpatient rehabilitation facilities (IRFs), and long-term care hospitals (LTCHs)—may be paid very different rates to treat beneficiaries with similar medical conditions and health status. Medicare's conditions of participation and coverage rules do not clearly delineate the types of patients who are appropriate for some PAC settings. PAC use also varies because some areas of the country do not have any IRFs or LTCHs so beneficiaries living in these areas may receive this care in SNFs or remain in an acute care hospital. The lack of placement guidelines, the availability of PAC providers across markets, and multiple payment systems result in a wide variation in the use and cost of posthospitalization care for beneficiaries in FFS Medicare.

At the same time, Medicare's prospective payment systems create incentives for providers to shift care to other settings. Hospitals and PAC providers may discharge patients to other PAC settings or home, and PAC providers may rehospitalize patients rather than treat them in the PAC setting to lower their own costs. According to our analysis of 2006 Medicare data, 17 percent of beneficiaries who were discharged to one PAC setting subsequently used a second PAC service, but we do not know if this practice reflects a more appropriate placement for the patient or, in the case of episode-based or discharge-based payments, if it is a way for a provider to lower its own costs.

In its June 2008 report, the Commission recommended that the Congress require the Secretary to create a voluntary pilot program to test the feasibility of bundled payments for services around a hospitalization for select conditions (Medicare Payment Advisory Commission 2008). Under a bundled payment, a provider or set of providers are at risk for the care furnished across multiple settings over some period of time after a triggering event such as an inpatient stay. The recommendation reflected the Commission's concern that FFS payment fails to encourage providers to cooperate with one another to improve coordination of care and appropriately control the volume and cost of services delivered across an episode of care. The Patient Protection and Affordable Care Act of 2010 included a provision that directed the Secretary to test the bundling concept. In August 2011, CMS announced an initiative to test a variety of bundle designs (see text box, pp. 66–67).

Since its initial work on bundling, the Commission has observed that the distortions created by FFS payment systems underscore the urgency to reform this method of paying providers. The Commission has focused its bundling work on PAC because the variation in program spending per beneficiary exceeds the variation in any other provider sector, suggesting opportunities for program savings if practice pattern variations are narrowed (Medicare Payment Advisory Commission 2011). Per person per month use of PAC services differed more than twofold between low-use and high-use geographic areas (10th and 90th percentiles). In contrast, inpatient hospital and ambulatory service per capita spending varied only 20 percent. An Institute of Medicine study found that variation in per capita spending on PAC explained 40 percent of the variation in total Medicare per capita spending and that utilization varied most significantly for HHA and SNF services (Institute of Medicine 2013). Potentially avoidable readmissions to hospitals are another opportunity for better care coordination and lower program spending. Risk-adjusted rates of readmission in 2010 varied 50 percent between hospitals in the lowest decile and in the highest decile (see Chapter 4).

Bundling could achieve several goals. First, care would be less fragmented because all providers involved in delivering care to a beneficiary would be accountable for all care furnished during an episode. As a result, care coordination and quality of care could improve. Providers would have an incentive to furnish the right mix of services to achieve good outcomes. Although these care coordination services might raise providers' costs, these costs could be offset by savings associated with averted readmissions or less costly PAC. Second, bundling could give providers experience managing care across a continuum that is likely to be required in broader payment

EMBARGOED FOR RELEASE UNTIL 4:00PM JUNE 14, 2013

CMS's Bundled Payments for Care Improvement Initiative

In 2011, CMS launched an initiative for contracting entities (providers or conveners of participating providers) to develop and test four models of bundled payments (Centers for Medicare & Medicaid Services 2011). Model 2 and Model 3 include post-acute care (PAC). Model 2 bundles payment for all the services delivered during an inpatient stay, PAC, and readmissions. This model differs from the Acute Care Episode (ACE) Demonstration, a prior Medicare demonstration, because it includes postdischarge services and related readmissions; the ACE demonstration bundled only hospital and physician services. Model 3 bundles begin at initiation of PAC services within 30 days after an inpatient hospitalization and include PAC, clinically related postdischarge services, and readmissions (Table 3-1).[1] An entity could submit applications for one or more models and, for Model 2 and Model 3, propose the clinical conditions it would test.

Under these bundled payment arrangements, the contracting entity and its providers will be paid fee-for-service (FFS) for all services rendered. A target price will be established for each condition based on the entity's historic spending minus an agreed-upon discount. CMS will conduct periodic retrospective reconciliations to compare actual FFS payments with the target price. If, during the period, aggregate FFS payments are higher than the agreed-upon target amount, the entity must repay Medicare. If payments are less, the entity is paid the difference (which may then be shared among participating providers). CMS will also monitor aggregate Medicare Part A and Part B FFS spending for the 30 days after the bundle period; if spending is higher than historic spending plus a risk threshold, the entity owes CMS the difference. This feature is intended to prevent providers from delaying service provision until after the bundle period as a way to avoid the bundle's spending limits.

In 2012, the applicants for this initiative proposed conditions to bundle, the duration of the bundle (30 days, 60 days, or 90 days postdischarge for Model 2 and post-initiation of PAC for Model 3), a risk-adjustment method, quality measures, the network of participating providers and a method to share savings with them, and any desired waivers from current Medicare policy (such as the three-day hospital stay requirement for Medicare coverage of skilled nursing facility care). Technical panels reviewed all applications. Based on the wide range of conditions proposed by applicants, in November 2012 CMS announced a preliminary list of 48 clinical conditions (which include a collection of Medicare severity–diagnosis related groups (MS–DRGs)) it would consider for the initiative. All the clinical conditions include the full family of MS–DRGs (with and without complications), thus preventing an entity from opting to test only lower severity patients within a condition.

In January 2013, 69 contracting entities (involving 357 providers) were approved (for Model 2 and Model 3) to move to the next, no-risk phase of the initiative (Center for Medicare and Medicaid Innovation 2013, Centers for Medicare & Medicaid Services 2013a, Centers for Medicare & Medicaid Services 2013b).[2] During this phase, entities share ideas about care pathways and quality measures and provide feedback to participating providers. CMS is holding several webinars to share information about program policies and requirements as they are decided and for entities to share strategies with each other about how to meet the target prices. For example, CMS is expected to identify data requirements and design several payment-related policies that may affect an entity's decision to proceed to the initiative's financial risk phase. Either party may decide not to enter into a project, depending on the final details of a contract between CMS and the entity and review by CMS's program integrity unit. CMS anticipates moving to the risk phase of the initiative in October 2013.

CMS is using the no-risk phase to delineate approved approaches to many complex features of the bundling initiatives. CMS outlined some restrictions on gainsharing in its request for proposals, such as basing payments not on the volume or value of referrals but on savings. CMS will review each applicant's approach to gainsharing. It is also establishing a set of quality measures and the required patient assessment tools entities must use, but it will not tie payments to meeting certain minimum quality metrics. Participants will be

(continued next page)

EMBARGOED FOR RELEASE UNTIL 6/7/2013

CMS's Bundled Payments for Care Improvement Initiative (cont.)

TABLE 3–1

Comparison of CMS's Bundled Payment for Care Improvement Initiative models that include post-acute care

Feature	Episode covered by Model 2 bundle: Inpatient stay + PAC + readmissions	Episode covered by Model 3 bundle: Post-acute care + readmissions
Services included	Furnished during the bundle period: • Inpatient stay • Physician services • Post-acute care • Related readmissions • Other Part B services	Furnished during the bundle period: • Post-acute care • Physician services • Related readmissions • Other Part B services
Case types	Entity selects any of the 48 clinical conditions that make up a collection of MS–DRGs	Entity selects any of the 48 clinical conditions that make up a collection of MS–DRGs
Episode initiation	Hospital stay	Use of SNF, IRF, LTCH, or HHA services after hospital discharge
Payment	Entity is paid fee-for-service fees with a retrospective comparison of payments to target prices, which incorporate an agreed-upon discount. If payments are less than the target, Medicare pays the difference to the contracting entity. If payments are greater than the target, the entity repays Medicare the difference.	Entity is paid fee-for-service fees with a retrospective comparison of payments to target prices, which incorporate an agreed-upon discount. If payments are less than the target, Medicare pays the difference to the contracting entity. If payments are greater than the target, the entity repays Medicare the difference.
Postepisode reconciliation *(30 days after end of episode)*	If total Medicare Part A and Part B payments following the episode period exceed some threshold, the entity repays Medicare for the excess.	If total Medicare Part A and Part B payments following the episode period exceed some threshold, the entity repays Medicare for the excess.
Expected minimum discounts to Medicare	3% for 30- and 60-day episodes; 2% for 90-day episodes	3%
Quality measures	Entity proposes measures but CMS decides on a standardized set. No pay-for-performance component.	Entity proposes measures but CMS decides on a standardized set. No pay-for-performance component.

Note: PAC (post-acute care), MS–DRG (Medicare severity–diagnosis related group), SNF (skilled nursing facility), IRF (inpatient rehabilitation facility), LTCH (long-term care hospital), HHA (home health agency).

Source: Center for Medicare and Medicaid Innovation. 2011. Bundled payments for care improvement initiative: Request for application. Available at http://innovation.cms.gov/initiatives/bundled-payments/bpci-archive.html.

subject to all rules associated with FFS, though CMS is considering entities' requests to obtain waivers from certain program requirements. CMS is reviewing each entity's method for notifying beneficiaries of its participation in the initiative and ensuring that beneficiaries have a choice of providers. ■

reforms. Last, bundling would encourage providers to make clinically appropriate decisions about which patients are referred to PAC, which PAC setting is used, and the most efficient mix of services beneficiaries receive. At the same time, depending on the policy design, bundled payments could create incentives for undesirable provider behavior, such as the underprovision of care (to lower the spending for a bundle) or the provision of unnecessary initial hospitalizations (to generate new bundles). Bundling could also require considerable infrastructure to implement. Design features could dampen these disadvantages, as discussed throughout this chapter.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

The Commission notes that bundled payments are not the only method to align provider incentives and increase accountability for beneficiary care. Another promising avenue is the accountable care organization (ACO), in which a set of physicians (and possibly other providers) are responsible for annual Medicare spending and quality of care for a defined patient population. However, many providers are not ready to participate in ACOs and manage all services furnished by all providers to a panel of beneficiaries over a year. For these providers, bundled payments offer an alternative to ACOs that would instill some accountability for the care spanning multiple providers over a period of time and allow them to gain the experience needed to take on the risks associated with broader payment reforms. The Commission considers the approaches complementary. Both require providers to consider the care furnished within and extending beyond their "four walls." Bundled payments also require implementation of a common patient assessment tool across settings (or adding common elements to existing tools), including assessments at a patient's discharge from the hospital. A tool such as the Continuity Assessment Record and Evaluation could facilitate more accurate risk-adjusted payments and fair comparisons between beneficiaries treated in different settings but would not, by itself, result in more appropriate use of PAC settings.

Illustration of how services could be bundled

The Commission has discussed various design aspects to bundle services that include PAC—the services in the bundle, the duration of the bundle, how entities would be paid, and the incentives required to encourage more efficient provision of care. Each decision involves trade-offs between increasing the opportunities for care coordination and requiring providers to accept risk for care beyond what they furnish. To illustrate the trade-offs inherent in these design decisions, we selected a design consistent with the Commissioners' discussion of bundles that include more services over a longer period of time rather than fewer services over a shorter period of time. We also considered a design that does not require providers to have an infrastructure to make and receive payments for other providers. Clearly, there are other possible designs with different strengths and weaknesses. We use this bundle design to frame a conversation about how best to proceed with this potential payment reform.

The illustration considers services furnished during an initial hospital stay and spanning 90 days after discharge. The example design includes the initial hospital stay, potentially avoidable readmissions, any PAC, and physician services furnished during the hospital and institutional PAC stays (in SNFs, IRFs, and LTCHs). Services excluded from the bundle would continue to be paid FFS. To minimize the infrastructure required if one provider or entity received an all-inclusive amount (which would be disbursed to providers that furnished services during the bundle), we assumed that providers would continue to receive FFS-based payments from CMS. To create incentives for providers to lower their spending for the episode, this illustration has CMS comparing average episode spending over some period of time (such as a year) with a benchmark set for each condition. If providers kept their average spending below the benchmark, CMS would return some portion of the "savings" (the difference between the benchmark and average payments) to each provider. If actual spending is above the benchmark, all providers would be at risk for all or some portion of the amount above it.

Throughout this illustration, many of our analyses focused on 10 conditions with high rates of PAC use (i.e., relative to other conditions) and, at discharge from the acute care hospital, the beneficiaries went to a broad mix of PAC settings (see text box, p. 70–71). We focused on bundles that include PAC because of the large variation in spending for these services (Table 3-2). Across the 10 conditions, interquartile spending on PAC services varied fourfold, with medical conditions generally exhibiting more variation than surgical ones.

The selected conditions include surgical and medical conditions. The 10 conditions accounted for 23 percent of all hospital episodes (90-day bundles that include the initial hospital stay, potentially avoidable readmissions, PAC, and physicians' services furnished during institutional care—hospitals, SNFs, IRFs, and LTCHs) and 15 percent of all FFS spending. Bundled payments with this design for all conditions would encompass over half (56 percent) of FFS spending.

Scope of services to include in the bundle

The first design decision centers on the services to include in the bundle. Bundles that include more services would require providers to be accountable for a wide range of care, thereby creating greater incentives for care coordination than narrowly defined bundles. Providers would be at risk for the cost and quality of services they do not directly

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 11, 2013

TABLE 3–2

Spending on post-acute care during 90-day bundles varies more than fourfold for 10 conditions that frequently involve this service use

Condition	Medical or surgical	Number of episodes	Episode spending			Ratio of 75th to 25th percentile
			Mean	25th percentile	75th percentile	
Stroke	Medical	10,740	$20,411	$6,856	$30,300	4.4
Simple pneumonia & pleurisy	Medical	20,780	10,567	2,787	15,082	5.4
Coronary bypass w/ cardiac catheterization	Surgical	2,276	6,539	1,887	7,957	4.2
Heart failure & shock	Medical	15,376	9,301	2,319	12,379	5.3
Major small & large bowel procedures	Surgical	6,180	8,169	2,176	10,528	4.8
Major joint replacement	Surgical	29,627	9,752	4,006	13,277	3.3
Hip & femur procedures except major joint replacement	Surgical	7,814	22,052	13,244	30,045	2.3
Fractures of hip & pelvis	Medical	2,066	17,392	9,044	23,854	2.6
Kidney & urinary tract infections	Medical	10,133	13,048	3,909	19,771	5.1
Septicemia without ventilator 96 + hours	Medical	4,961	13,532	3,861	20,116	5.2
Average for 10 conditions						4.3

Note: Post-acute care (PAC) includes services furnished by home health agencies, skilled nursing facilities, inpatient rehabilitation facilities, and long-term care hospitals. We risk adjusted spending using Medicare severity–diagnosis related groups (MS–DRGs) and standardized payments for differences in wages and special payments, such as teaching, disproportionate share, and outlier payments. Episodes were initiated by a hospital stay with an admission date from January 1, 2007, through August 31, 2008. Spending for 90-day inpatient hospital–post-acute care bundles includes payments for initial hospital stay, post-acute care, potentially preventable readmissions, and the physician services furnished during the hospital and institutional PAC stays. Data shown are for MS–DRG acuity level 1 (no complications or comorbidities) bundles.

Source: Analysis of 5 percent 2007 and 2008 claims data prepared for MedPAC by 3M Health Information Systems.

EMBARGOED FOR RELEASE UNTIL 1:00 PM JUNE 14, 2013

furnish. For example, in a bundle that spans inpatient hospital, PAC, and readmissions (referred to as a combined hospital–PAC bundle), providers would have strong incentives to coordinate care across PAC settings, carefully manage care transitions, and refer beneficiaries to providers that minimize the risk of readmissions. The style of practice encouraged would be in sharp contrast to the current FFS environment, in which acute care hospitals generally do not track what happens to patients once they are discharged and, except in integrated systems, do not have a financial stake in which setting is selected and the amount of services furnished to patients after they are discharged.

A PAC-only bundle would establish one payment to span PAC (HHA, SNF, IRF, and LTCH) services and possibly readmissions. Hospitals or physicians would have no direct incentive to refer patients to PAC or to specific PAC settings. Because their incentives would not be aligned with those for the PAC providers, there could be more checks on the appropriateness of PAC use. At the same time, PAC providers would encourage physicians and discharge planners to refer beneficiaries to PAC, which could generate unnecessary care. PAC-only bundles could be more appealing to PAC providers who may have limited experience managing acute care, especially since the initial hospital stay makes up a large portion of bundle spending. However, because providers would have less incentive to coordinate care between the hospital and PAC settings, PAC-only bundles may not achieve the levels of care coordination of broader bundles.

There are two reasons to consider combined hospital–PAC bundles. First, even among conditions with high PAC use, not all beneficiaries use care after hospitalization, and the share using PAC is highly variable. The vast majority of episodes for orthopedic conditions includes PAC, but the use in other conditions is generally lower. Fewer than half of the episodes for four medical conditions include PAC. Separate PAC-only bundles could encourage PAC use, even when it is not medically necessary, because hospitals and physicians are not financially liable for the spending on these services. PAC providers would be keen on generating volume by working with hospital discharge planners to identify beneficiaries who are likely candidates to receive PAC. Yet, even for conditions with relatively high PAC use, beneficiaries' use of these services is not universal, suggesting that PAC use could increase for beneficiaries with many common conditions.

Commission's analysis of bundled payment designs

To examine the alternative designs for bundled payments, the Commission contracted with 3M Health Information Systems. Bundles spanning 30 days and 90 days were constructed for various scopes of service initiated by a hospital stay between January 1, 2007, and August 30, 2008 (3M Health Information Systems 2013a). The analyses included beneficiaries at all severity levels and those whose stays qualified for outlier payments. The analyses excluded beneficiaries who died during the hospital stay or bundle period. We examined the following bundle designs:

- inpatient hospital–post-acute care (PAC) bundles that include the inpatient stay, PAC services (home health agency (HHA), skilled nursing facility (SNF), inpatient rehabilitation facility (IRF), and long-term care hospital (LTCH)), physician services during any hospital stays and institutional PAC stays (IRF, SNF, and LTCH), and hospital readmissions;
- PAC-only bundles that include formal PAC services (HHA, SNF, IRF, and LTCH), the physician services furnished during institutional PAC stays, and spending associated with readmissions (hospital and physician services); and
- bundles that included and excluded potentially preventable readmissions, using 3M's definition and methodology (Goldfield et al. 2008).

Medicare spending was standardized to adjust for differences in wages and special payments for teaching hospitals, disproportionate share hospitals, and outliers. Spending was risk adjusted using the Medicare severity–diagnosis related groups (MS–DRGs) to account for differences in clinical severity across patients during their hospital stays. Episodes were assigned to base diagnosis related groups and acuity levels using MS–DRGs. Acuity level 1 identifies episodes without a major complication or comorbidity (MCC); acuity level 2 includes episodes with an MCC. A base MS–DRG was split into the two acuity levels even if the standard MS–DRGs used by Medicare were not differentiated by the presence of an MCC. To simplify the display of our results, we present our analyses of acuity level 1 episodes, but the trends were similar for acuity level 2 episodes.

We included physician services provided during the initial hospital stay, readmissions, and institutional PAC stays. The inclusion of physician services in the bundle is designed to encourage greater collaboration among physicians providing care to a beneficiary to improve quality outcomes and efficiency. Although institutional PAC settings have formal relationships with the physicians who practice in these settings, HHAs may not.

(continued next page)

EMBARGOED FOR RELEASE UNTIL 6:00PM JUNE 14, 2013

For the 10 conditions with relatively high PAC use, the share of hospital stays that led to PAC varied from 36 percent (beneficiaries with pneumonia) to 94 percent (for beneficiaries recovering from hip and femur procedures except major joint replacement) (Table 3-3, p. 72). The use of PAC greatly increased average episode spending. Across the 10 conditions, spending for episodes with PAC was 2.6 times the spending for episodes without PAC. PAC made up more than one-third of the bundle spending on average and accounted for more than half the spending for three conditions (stroke, hip and femur procedures except major joint replacement, and fractures of hip and pelvis).

A second reason to design combined hospital–PAC bundles is to narrow the variation in the PAC settings used by similar patients. Currently, hospitals, physicians, and PAC providers have no incentive to work with beneficiaries to make cost-effective PAC placement decisions. Several studies have found that PAC placements reflect factors such as the number and mix of providers in a market, proximity of the discharging hospital to PAC providers, and whether the hospital has PAC providers in its system (Assistant Secretary for Planning and Evaluation 2008, Buntin et al. 2005, Medicare Payment Advisory Commission 2007). A combined hospital–PAC bundle would help engage discharging physicians to make medically appropriate, cost-effective PAC placement selections.

Commission's analysis of bundled payment designs (cont.)

To simplify the analyses, we included the spending on PAC services initiated (but not necessarily concluded) during 90-day windows. This approach avoids having to prorate spending for services that extend beyond the bundle window. Although many beneficiaries also use outpatient services (such as radiology, laboratory, and physical therapy services), we excluded them in the illustrative model to limit the number of providers whose care would need to be coordinated to keep spending under the benchmark, which would ease implementation. The bundles also exclude program spending on outpatient prescription drugs (Part D) but do include drugs delivered in hospitals and institutional PAC settings (SNFs, IRFs, and LTCHs). Including spending on outpatient prescription drugs would be complicated by the fact that not all beneficiaries participate in Part D. We do not know the bias that would be introduced by having data on only a subset of beneficiaries.

Bundles that included readmissions were constructed using potentially preventable readmissions (Goldfield et al. 2008). Only those readmissions that were potentially preventable were included in the bundle. If a readmission that was not preventable occurred during the 90-day period after the initial hospital discharge, the episode was terminated and excluded from the analysis. The readmission that was not preventable could then initiate a new episode. Where indicated, to assess their effect on our ability to predict bundle spending, some analyses exclude all readmissions.

To compare the ability of the bundle design to explain the variation in resource use (as measured by charges) and spending across episodes, episodes were risk adjusted using MS–DRGs, clinical risk groups (CRGs), and functional status. CRGs account for differences in the chronic illness burden of patients at the time of the discharge from the hospital, using the diagnostic and procedure information gathered from hospital and physician claims during the year before the episode (Hughes et al. 2004). For episodes that included home health, SNF, or IRF services, functional and cognitive status information at admission to PAC was used to evaluate the ability of functional status to explain differences in resource use in the bundle. Patient information from the three assessment instruments (the IRF–Patient Assessment Instrument, the SNF Minimum Data Set, and the HHA Outcome and Assessment Information Set) was standardized and grouped into ranges of low, medium, and high impairment for four functional domains: mobility, self-care, incontinence, and cognitive reasoning (3M Health Information Systems 2013b, Mallinson et al. 2012). According to the level of functional status in each of the four domains, beneficiaries were assigned to one of the nine composite functional categories that represent the extent of overall beneficiary functional status impairment (3M Health Information Systems 2013b). ■

EMBARGOED FOR RELEASE UNTIL 12:01 AM JUNE 14, 2013

Selection of the PAC setting has significant implications for bundle spending. For the 10 conditions we examined, spending for beneficiaries who first used IRFs was 30 percent higher on average than for those who first used SNFs (Table 3-4, p. 72). Spending for beneficiaries discharged to SNFs was on average more than double that for those who first received HHA services.

Medicare's Post-Acute Care Payment Reform Demonstration examined outcome differences in patients across PAC settings. It found no differences in mobility outcomes for beneficiaries using different PAC settings and small differences in the self-care function. This overlap in patients across settings suggests that some shifts in service use would not necessarily lower the quality of care (Gage et al. 2011). However, not all beneficiaries could be shifted to lower cost settings. For example, beneficiaries without adequate support at home or residing in nursing homes would not be candidates for home health care. Likewise, complex patients receiving rehabilitation services may not be appropriate for SNF care.

Include or exclude readmissions in the bundle

The definition of the bundle also needs to specify whether readmissions are included or excluded. In our illustration, in bundle designs that include readmissions, we consider potentially preventable readmissions (PPRs). PPRs hold providers accountable for those readmissions that

TABLE 3–3

Spending is considerably higher for bundles that include post-acute care

Condition	Percent using PAC	Mean episode spending: With any PAC	Mean episode spending: Without any PAC	Ratio of spending for episodes with PAC to episodes without PAC	PAC spending as a share of total episode spending
Stroke	64%	$30,770	$8,534	3.6	57%
Simple pneumonia & pleurisy	36	20,522	7,555	2.7	31
Coronary bypass w/cardiac catheterization	58	45,213	37,134	1.2	9
Heart failure & shock	43	21,219	8,828	2.4	28
Major small & large bowel procedures	37	32,110	18,661	1.7	13
Major joint replacement	82	24,691	14,162	1.7	37
Hip & femur procedures except major joint replacement	94	36,633	12,860	2.8	63
Fractures of hip & pelvis	90	24,025	5,671	4.2	65
Kidney & urinary tract infections	49	21,464	6,381	3.4	31
Septicemia without ventilator 96+ hours	48	27,585	11,331	2.4	30
Average for 10 conditions	60			2.6	36

Note: PAC (post-acute care). Post-acute care includes services furnished by home health agencies, skilled nursing facilities, inpatient rehabilitation facilities, and long-term care hospitals. Episodes were initiated by a hospital stay with an admission date from January 1, 2007, through August 31, 2008. We risk adjusted spending using Medicare severity–diagnosis related groups and standardized payments for differences in wages and special payments, such as teaching, disproportionate share, and outlier payments. Spending for 90-day inpatient hospital–post-acute care bundles includes payments for initial hospital stay, post-acute care, potentially preventable readmissions, and the physician services furnished during the hospital and institutional PAC stays. Data shown are for Medicare severity–diagnosis related group acuity level 1 (no complications or comorbidities) bundles.

Source: Analysis of 5 percent 2007 and 2008 claims data prepared for MedPAC by 3M Health Information Systems.

TABLE 3–4

Mean bundle spending varies considerably by first post-acute care site used

Condition	First post-acute care site used: HHA	First post-acute care site used: SNF	First post-acute care site used: IRF	Ratio of IRF to SNF spending	Ratio of SNF to HHA spending
Stroke	$13,344	$33,266	$40,881	1.2	2.5
Simple pneumonia & pleurisy	12,403	26,597	39,166	1.5	2.1
Coronary bypass w/ cardiac catheterization	39,708	52,554	60,677	1.2	1.3
Heart failure & shock	13,881	30,984	45,516	1.5	2.2
Major small & large bowel procedures	25,658	39,443	48,933	1.2	1.5
Major joint replacement	17,712	28,013	32,891	1.2	1.6
Hip & femur procedures except major joint replacement	17,177	38,324	40,770	1.1	2.2
Fractures of hip & pelvis	9,980	26,947	32,200	1.2	2.7
Kidney & urinary tract infections	11,597	27,613	37,739	1.4	2.4
Septicemia without ventilator 96 + hours	16,516	32,961	47,081	1.4	2.0
Average for 10 conditions				1.3	2.1

Note: HHA (home health agency), SNF (skilled nursing facility), IRF (inpatient rehabilitation facility). Post-acute care includes services furnished by home health agencies, skilled nursing facilities, inpatient rehabilitation facilities, and long-term care hospitals. Episodes were initiated by a hospital stay with an admission date from January 1, 2007, through August 31, 2008. We risk adjusted spending using Medicare severity–diagnosis related groups (MS–DRGs) and standardized payments for differences in wages and special payments, such as teaching, disproportionate share, and outlier payments. Spending for 90-day inpatient hospital–post-acute care bundles includes payments for initial hospital stay, post-acute care, potentially preventable readmissions, and the physician services furnished during the hospital and institutional post-acute care stays. Data shown are for MS–DRG acuity level 1 (no complications or comorbidities) bundles.

Source: Analysis of 5 percent 2007 and 2008 claims data prepared for MedPAC by 3M Health Information Systems.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2010

TABLE 3–5

Lowering readmissions presents a savings opportunity

Condition	Readmission rate	Mean episode spending: With readmissions	Mean episode spending: Without readmissions	Ratio of spending for episodes with readmissions to those without readmissions	Readmissions spending as a share of total episode spending*
Stroke	16%	$38,078	$19,824	1.9	26%
Simple pneumonia & pleurisy	17	$24,974	9,722	2.6	42
Coronary bypass w/cardiac catheterization	18	$55,591	38,840	1.4	22
Heart failure & shock	28	$24,900	10,003	2.5	26
Major small & large bowel procedures	14	$38,297	21,095	1.8	32
Major joint replacement	8	$40,172	21,313	1.9	27
Hip & femur procedures except major joint	15	$49,517	32,707	1.5	24
Fractures of hip & pelvis	13	$34,550	20,335	1.7	27
Kidney & urinary tract infections	18	$25,511	11,183	2.3	38
Septicemia without ventilator 96+ hours	20	$33,985	15,447	2.2	36
Average for 10 conditions	17			2.0	30

Note: Spending for 90-day inpatient hospital–post-acute care bundles includes payments for initial hospital stay, post-acute care, and the physician services furnished during the hospital and post-acute care stays. The bundles that include readmissions also include the spending for the hospital readmission and physician services during the readmission. Episodes were initiated by a hospital stay with an admission date from January 1, 2007, through August 31, 2008. We risk adjusted spending using Medicare severity–diagnosis related groups (MS–DRGs) and standardized payments for differences in wages and special payments, such as teaching, disproportionate share, and outlier payments. Readmission rates are for potentially preventable readmissions. Data shown are for MS–DRG acuity level 1 bundles.
* Spending on readmissions was calculated for episodes that include readmissions.

Source: Analysis of 2007 and 2008 5 percent claims data prepared for MedPAC by 3M Health Information Systems.

EMBARGOED FOR RELEASE UNTIL 1:00 PM JUNE 14, 2013

they should be able to avert with adequate primary and outpatient care. However, PPRs could encourage shifts in providers' coding of diagnoses to avoid including a readmission in the bundle. Using an all-cause measure would increase the readmissions that providers would be at risk for but would counter any incentive to change coding practices. There is considerable overlap in the two measures. PPRs account for about 80 percent of all-cause readmissions (see Chapter 4).

If PPRs were excluded from the bundle, hospitals would continue to be paid separately for readmissions. In this scenario, it would make sense to extend the current hospital readmission reduction policies to all PAC providers so that they share the responsibility for readmissions.[3] Readmission reduction policies similar to those that began in October 2012 for hospitals would be applied to PAC providers with high readmission rates during a year. This past year, the Commission recommended that SNFs be held accountable for readmissions that occur during SNF stays and noted that it would consider similar policies for other PAC settings.

Alternatively, including readmissions in the bundle would give providers a strong incentive to coordinate care across all settings. All providers, not just hospitals, would share in the responsibility for readmissions because the bundle would include the cost of readmissions. Because hospitals would already be at risk for readmissions, the conditions with bundled payments would be excluded from the hospital readmission policy. Otherwise, hospitals could face two penalties if their readmission rates were high: They would be at financial risk for the readmission and the cases would count in calculation of their readmission rate.

Including readmissions in the bundle represents an opportunity for providers to lower their total bundle spending. Across the 10 conditions examined, 17 percent of beneficiaries without complications or comorbidities (acuity level 1) on average were readmitted during a 90-day period after the initial hospital stay (Table 3-5). Across the 10 conditions, bundles with readmissions were on average twice as costly as those without them. While other factors also contributed to the episodes' higher spending, readmissions made up 30 percent of the spending for

TABLE 3–6 **Spending included in 90-day bundles is not proportionately greater than 30-day bundle spending**

Condition	Share of 90-day spending included in 30-day bundle
Stroke	77%
Simple pneumonia & pleurisy	80
Coronary bypass w/cardiac catheterization	96
Heart failure & shock	74
Major small & large bowel procedures	93
Major joint replacement	92
Hip & femur procedures except major joint replacement	74
Fractures of hip & pelvis	74
Kidney & urinary tract infections	72
Septicemia without ventilator 96+ hours	78
Average for 10 conditions	84

Note: Spending for bundles includes payments for the initial hospital stay, post-acute care, potentially preventable readmissions, and the physician services furnished during the hospital and institutional post-acute care stays. Post-acute care refers to home health care, skilled nursing facilities, inpatient rehabilitation facilities, and long-term care hospitals. Episodes were initiated by a hospital stay with an admission date from January 1, 2007, through August 31, 2008. We risk adjusted spending using Medicare severity–diagnosis related groups (MS–DRGs) and standardized payments for differences in wages and special payments, such as teaching, disproportionate share, and outlier payments. Readmission rates are for potentially preventable admissions. Data shown are for MS–DRG acuity level 1 bundles.

Source: Analysis prepared by 3M Health Information Systems for MedPAC using 2006–2008 Medicare claims data.

bundles with readmissions. Because readmission rates vary by PAC setting, bundled payments may also encourage entities to use PAC settings with low readmission rates, all else being equal.[4] Beneficiaries who did not use PAC had considerably lower readmission rates (on average 10 percent) than beneficiaries who did.

Duration of the bundle

The length of the bundle establishes the number of days when service utilization will be included. There are advantages and disadvantages to each bundle length, with an inherent trade-off between holding providers responsible for more services (i.e., over a longer period of time) and the likelihood that services furnished at the end of the bundle period will be unrelated to the original hospital stay. Bundles of relatively short duration, such as 30 days, hold providers accountable for services most likely related to the principle reason for the initial hospitalization. Given the long duration of much PAC, short bundles will require a decision about how to consider the costs of PAC services that have been initiated but not completed during the time period.

Long bundles create strong incentives to coordinate care and give providers flexibility to consider the mix and timing of services they furnish. They also accommodate the variation in recuperation times required by beneficiaries to reach similar outcomes. Long bundles more closely mirror the duration of PAC use: One-third of SNF stays are more than 30 days long, and over half of beneficiaries who use home health services receive care that spans 45 days or more. However, long bundles may include care at the end of the period that is unrelated to the original hospital stay.

Long bundles require providers to assume greater financial risk because costs and readmissions are more variable with longer episodes (Dobson et al. 2012). However, the added risk is not proportional to the expansion of the time frame. Bundle lengths three times as long do not triple bundle spending. Most 90-day spending was incurred within the first 30 days after hospital discharge (Table 3-6). These results are consistent with another study that found that, as episode lengths increase, the variation in costs and readmissions (and hence associated risk) did not increase proportionally (Gage et al. 2009, Sood et al. 2011).

Whatever the bundle length, providers would have an incentive to delay care until after the bundle period has ended. As a result, CMS will need to adopt policies to discourage these delay tactics. In CMS's bundling initiative, spending during the 30 days after the bundle has ended will be compared with aggregate historic spending trended forward. Providers will be at risk for spending above some threshold. Providers that systematically delay medically necessary readmissions until after the bundle period has ended will be at financial risk if their spending in the postbundle period is substantially higher than expected.

Bundle designs differ in the variation in spending they introduce and shape our ability to account for the variation in resource use

Bundle designs differ in the variation in spending across episodes and how much of the variation can be predicted using MS–DRGs and CRGs. Short bundles that include fewer services display less variation, which is easier to predict (have higher r^2) than longer bundles that include

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 12, 2013

TABLE 3–7

Comparison of ability to predict resource use at episode level, by bundle definition across all MS–DRGs

	Inpatient hospital–PAC bundle		PAC-only bundle	
Bundle length	With readmissions	Without readmissions	With readmissions	Without readmissions
30 days	39%	43%	8%	17%
90 days	34	42	8	16

Note: MS–DRG (Medicare severity–diagnosis related group), PAC (post-acute care). Resource use was measured using charges. Predictive ability was measured with r^2. Post-acute services include services furnished in skilled nursing facilities, home health care, inpatient rehabilitation facilities, and long-term care hospitals. Spending for inpatient hospital–PAC bundles includes payments for the initial hospital stay, post-acute care, potentially preventable readmissions, and the physician services furnished during the hospital and institutional PAC stays. Spending for PAC-only bundles includes payments for post-acute care, potentially preventable readmissions, and the physician services furnished during the hospital readmission and institutional PAC stay. Inpatient hospital–PAC bundles were initiated by a hospital stay with an admission date from January 1, 2007, through August 31, 2008. We risk adjusted spending using MS–DRGs and patient comorbidities (using clinical risk groups) and standardized payments for differences in wages and special payments, such as teaching, disproportionate share, and outlier payments. Data shown are for MS–DRG acuity level 1 bundles.

Source: Analysis prepared by 3M Health Information Systems for MedPAC using 2006–2008 Medicare claims data.

more services. We used charges to gauge resource use because they generally reflect patient complexity: Sicker patients use more services. Although payments instead of charges would give a better indication of how well the bundle design would fit the variation in bundle spending, the explanatory power is dominated by the circularity of using MS–DRGs to explain hospital spending, which is a large component of the combined hospital–PAC bundle spending.

Short (30-day) bundles explain slightly more of the variation in charges than long ones (90-day). Bundles that include hospital and PAC accounted for more of the variation than PAC-only bundles, in large part reflecting less well-developed risk-adjustment methods for PAC (Table 3-7).[5] Including readmissions increases the variation in spending and lowers the r^2, capturing the fact that readmissions are relatively infrequent but costly when they occur.

In selecting a bundle design, policymakers will need to consider the inherent trade-off between designs with strong incentives to coordinate care across settings and the variation in spending inherent in longer bundles that include more services. The bundle design with the highest explanatory power incorporates weaker incentives to coordinate care and share accountability across providers compared with more inclusive, longer bundles. Still, the explanatory power of the design with the strongest incentives (90-day combined hospital–PAC bundle that includes readmissions) is comparable to the diagnosis related group payment bundle and the per capita payments in Medicare Advantage.

We also examined the number of episodes an entity would need for the payments to be reasonably accurate for most bundles (referred to as a power calculation). Given the extent of variation in spending across episodes, the power calculation determines the number of episodes an entity would have to provide to be confident that the difference between its spending and national average spending was not due to chance. Across the 10 conditions, an entity would need to treat 150 cases for its spending to be within 10 percent of the national average spending for 90 percent of its episodes. Most hospitals (85 percent) paid under the inpatient prospective payment system treat this many cases (in these 10 conditions) a year, including rural hospitals. Because of the higher variation in PAC spending, the counts would be higher for PAC providers.

How to pay providers and encourage cost-effective care

In a bundled approach, one entity could be paid an all-inclusive amount to cover all services, or payments to individual providers could continue on an FFS basis. Each option has its advantages and disadvantages. To encourage providers to lower their spending per episode, CMS could establish benchmarks for each condition and compare them with actual average spending. In one version of this comparison, CMS could withhold a small amount from its payments to providers and, depending on average

EMBARGOED FOR RELEASE UNTIL 4:00PM JUNE 14, 2013

episode spending, return the withheld amounts (in the case of below-average spending) or keep it (in the case of above-average spending). Alternatively, CMS could take a shared-risk approach, in which providers would be at risk for or share in the savings from average spending that is over or under the benchmark. With either option, providers would have an incentive to keep their average spending below the benchmark.

Options to pay providers

There are two basic ways providers could receive their Medicare payments. In one, an entity (such as the hospital providing the initial hospitalization or a third-party entity) could receive an all-inclusive amount to cover all care furnished during the bundle. The receiving entity would be responsible for paying all providers furnishing care to the beneficiary during the bundle window. This approach would require the entity to have an infrastructure sufficient to receive a lump-sum payment for an episode and, in turn, make payments to other providers. With one entity "in charge" of the episode, this approach may be more successful at achieving benchmark spending and providing a structure for coordinating care. However, many, if not most, providers are not ready to accept this level of financial risk, nor do they have the administrative infrastructure necessary to make payments to other providers.

Alternatively, Medicare could continue to pay each provider under its FFS systems, but the payment levels would be modified (see discussion on p. 80). For example, CMS would pay the hospital for the initial stay and any readmissions that occur, and CMS would pay PAC providers for the PAC services furnished. One refinement to this FFS-based approach could be to convert the discharge-based and episode-based PAC payments to a per day payment, so that PAC spending is not so "lumpy." For example, an HHA would receive a payment for each visit or day of home health care rather than a full 60-day episode payment. This refinement would allow providers to select an appropriate mix of PAC services without payments being made for such large units of service (HHA episodes or discharges from IRFs or LTCHs).

The advantage of the FFS-based bundle is that it does not require a single entity to receive payment for a collection of services, establish rates for other providers, and administer payments to them, thus making it practicable for most providers. It also avoids the thorny policy issues of how to attribute responsibility for episodes (since all providers share it) and which provider would receive the bundled payment (Hussey et al. 2009, Pham et al. 2010). Such implementation issues could thwart efforts to move this payment reform forward. An FFS-based approach is consistent with CMS's bundling initiative and Medicare's payments made to providers participating in ACOs. The disadvantage of this approach is that it could continue to encourage unnecessary service provision, depending on the incentives established for providers to keep their total spending below benchmarks. Therefore, it represents a modest improvement over current FFS.

Options to encourage spending below the benchmark

Under either approach to paying providers (a lump-sum payment to one entity or continued FFS payments to all providers), CMS could use a couple of different methods to encourage providers to keep their average episode spending below the benchmark. In one method, a small amount would be withheld from each provider's payments (from the hospital, PAC providers, and physicians), retained if the average episode's spending exceeded the benchmark, and returned if average episode spending was below it. Each provider would be at risk for the amount withheld from its FFS payment if average total episode spending exceeded the benchmark but would continue to be paid for services furnished. In a second method, all providers would share in the savings that result from below-benchmark spending and be at risk for spending above the benchmark. For example, if providers kept their average total episode spending below the benchmark, they would receive some share of the difference between their average spending and the benchmark. An individual provider's share of the savings could be proportional to its share of total episode spending. Under a shared-risk approach, a provider's rewards and losses are potentially larger than under a withhold approach, depending on the size of the withheld amount. A shared-risk approach could require lower benchmarks to "finance" the rewards. Regardless of the approach, the policymakers will need to decide whether the risks and rewards are symmetric.

When providers' payments exceed the benchmarks, CMS could use a couple of different ways to recoup funds. In one, withholds do not have to be paid back by providers when the benchmark is exceeded. Providers would forfeit the withheld amounts but their losses would be limited to the withheld amounts since they would continue to be paid the FFS-based payments (minus the withheld amounts). The program would continue to pay for services above the benchmarks, but its risk would be limited because the amounts withheld would help underwrite the additional

EMBARGOED FOR RELEASE UNTIL 6:00PM JUNE 14, 2013

spending above the benchmarks. Alternatively, each provider could be required to establish an irrevocable line of credit or escrow account with funds to cover a certain level of risk. CMS is using this approach in the ACO and bundling initiatives.

Either method (withholds or shared risk) should tie performance to the quality of care providers furnish. Under value-based purchasing, providers would have to keep their average total episode spending below the episode benchmark and meet certain minimum quality standards to receive the withheld amount or share in the savings achieved. Medicare is using this approach in the ACO shared savings program.

The success of any bundle design will pivot on whether providers accept the challenge to change the way they deliver care. At the heart of bundled payments is a collective incentive to do better—keep spending below a benchmark and achieve good patient outcomes. While collective incentives did not spark changes in physician behavior under the sustainable growth rate system, we think bundled payments differ in significant ways. Most importantly, bundled payments require collaboration among providers who know each other to jointly manage care. Future referrals for business will require providers to interact to achieve good results for an episode of care. Further, under the designs we discuss, there will be financial pressure on each provider to lower spending and achieve good outcomes. Otherwise, their payments will be lower than they currently are under FFS.

Options to counter the incentive to stint on care

Like any capitated or prospective payment system, bundled payments create an incentive to furnish fewer services than medically necessary or to use low-cost settings even if another setting is more appropriate. As such, without proper safeguards, a bundled payment puts beneficiaries at risk for underprovision of care or for referrals to PAC settings based on cost, not a beneficiary's care needs. Options to limit this behavior include:

- Continue to pay providers FFS. A provider is paid only if it furnishes care. If a patient has high care needs, the provider is paid for the care.
- Place all providers at financial risk for hospital readmissions by including readmissions in the bundle. If underfurnishing care raises readmission rates, this strategy will work against providers. They may opt to furnish care coordination services if the services lower the risk of readmissions or allow beneficiaries to be safely placed in lower cost settings.
- Compare the providers' average spending for episodes treated during a period of time (such as quarterly or annually) with benchmarks. Comparisons would not be made for individual cases, thus avoiding incentives to underfurnish care for a given episode. A provider can afford to refer beneficiaries to high-cost settings (IRFs and LTCHs) without necessarily incurring a loss in the aggregate. The benchmark would include some use of these services.
- Tie rewards to meeting minimum quality requirements and keeping spending below the benchmarks.

The Commission supports performance measurement programs that focus on a relatively small set of measures with an emphasis on outcomes (Medicare Payment Advisory Commission 2010, Medicare Payment Advisory Commission 2005). Quality measures to detect stinting on services could include rates of potentially avoidable hospital readmissions and emergency department (ED) visits as well as changes in functional status (see text box, pp. 78–79). Avoidable readmissions and ED visits can be indicators of poor quality of care, such as inadequate communication between the discharging hospital and admitting PAC provider during care transitions, selection of an inappropriate PAC setting for a clinically complex patient, and lack of timely access to follow-up physician care.

The ability to risk adjust quality measures is critical to assuring providers that their relative performance will not be affected by the clinical complexity of the patients they serve. For functional status, risk adjustment should compare actual change relative to expected change, given the type of patient treated. For patients with chronic diseases such as diabetes and congestive heart failure, the best possible outcome may be stabilizing physical or cognitive functioning; for patients recovering from orthopedic procedures, the expected outcome will be improvement in mobility. CMS is planning to use a shortened version of the Continuity Assessment Record and Evaluation tool in its bundling initiative to gauge changes in PAC patients' physical and cognitive function (Center for Medicare and Medicaid Innovation 2013). In addition, CMS could consider comparing groups of providers with a similar share of poor Medicare beneficiaries as a way to adjust for socioeconomic status.

EMBARGOED FOR RELEASE UNTIL 6:30PM JUNE 14, 2013

Quality measures to consider for bundled payments

Bundled payments contain certain financial incentives that could influence provider behavior and lead to compromised patient care. Providers could, for example, reduce the amount of resources used for direct patient care during the bundled payment period (i.e., stinting), inappropriately shift the timing of care delivery outside the bundled payment period when fee-for-service payment policies would apply, or increase hospital admissions to generate payments. To monitor and counter these potential unintended consequences, CMS would need to focus on a limited set of quality and utilization measures and eventually require providers to meet a minimum level of performance on them. These measures could be added to existing conditions of participation.

To develop a short list of measures (Table 3-8), we analyzed recent reports on post-acute care and long-term care performance measurement from the National Quality Forum's Measure Applications Partnership and the Long-Term Care Quality Alliance and the tentative set of quality measures that CMS is considering for the initial implementation phase of its bundling initiative (Center for Medicare and Medicaid Innovation 2013, Long-term Quality Alliance 2011, National Quality Forum 2012).[6] The measures fall into five broad categories to monitor: stinting on care, cost shifting outside the bundle period, increase in the number of bundles, care coordination and transitions, and patient experience. All measures can be calculated with currently available data collection methods. ■

(continued next page)

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Option to dampen the incentive to increase hospital admissions

With more dollars at stake, bundling could encourage hospital admissions for treatment that could have been delivered in a less intensive setting, such as managing care for beneficiaries with congestive heart failure or treating urinary tract infections. A beneficiary may require acute-level services but only because adequate primary care was not provided previously or the patient did not appropriately manage his or her condition. These unnecessary admissions can jeopardize patients' health—raising their risk, for example, of infection, medication error, and pressure sore injuries—and reduce their independence and functional ability associated with extended hospital stays.

Admission rates vary geographically (Epstein et al. 2011, Medicare Payment Advisory Commission 2012) and can be influenced by physician practice (Mitchell 2010, Stensland and Winter 2006). In a combined hospital–PAC bundle, the incentives of hospitals, physicians, and PAC providers are aligned. Some policy analysts worry that with more dollars at stake, bundled payments would raise the number of initial admissions to trigger a bundled payment. Although providers would also be at added risk, they may assume they can keep their average episode spending below benchmarks.

Under a bundled payment, CMS will need to monitor admission rates, particularly for discretionary admissions, and could eventually develop an admission policy. The Commission has work under way examining the variation in potentially preventable hospital admission rates (and ED visits) that could form the building block for an admission policy to discourage unnecessary admissions. Similar to the readmission policy, hospitals with above-average rates of potentially avoidable admissions could be penalized. Although the hospital value-based purchasing program starting in 2014 will hold hospitals accountable for total costs in the 30-day window postdischarge, the measure is one part of a composite that includes over two dozen measures, so the incentive is weak. Furthermore, it does not penalize hospitals for admitting potentially avoidable admissions, which could encourage hospitals to admit low-cost cases to keep their average spending low.

Setting the episode benchmark for the bundle

An episode's spending benchmark should be set to reflect the beneficiary's clinical needs and efficient providers' practice patterns and costs. Benchmarks should not vary by PAC setting; otherwise, PAC use will continue to vary

Quality measures to consider for bundled payments (cont.)

TABLE 3–8 **Quality measures to gauge provider performance under bundled payment**

Measure	Data source for: Measurement	Risk adjustment
Monitoring for stinting on care under bundled payment		
Readmissions: Rate of unplanned readmissions during and within 30 days after bundled payment period	Claims	Claims
ED use: Rate of ED use, total and without hospitalization, during and within 30 days after bundled payment period	Claims	Claims
Changes in patient physical and cognitive function	CARE tool items	CARE tool items
Monitoring for cost shifting outside bundled payment		
Service use and program costs within 30 days after bundled payment period	Claims	Claims
Medicare payments per beneficiary per month	Claims	Claims
Monitoring for increase in number of bundles		
Rate of potentially avoidable admissions	Claims	Claims
Monitoring care coordination/transitions		
Timely PAC admission: Length of time (average and median) from hospital discharge to PAC admission	Claims	Claims
Timely physician follow-up: Length of time (average and median) from hospital discharge to first physician visit	Claims	Claims
Monitoring patient experience		
Survey questions on provider communication, pain management, shared decision making	Selected CAHPS® survey items	N/A

Note: ED (emergency department), CARE (Continuity Assessment Record and Evaluation), PAC (post-acute care), CAHPS® (Consumer Assessment of Healthcare Providers and Systems®), N/A (not available).

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

for reasons other than clinical differences across patients. Appropriate risk adjustment incorporates the comorbidities and functional status of patients to discourage patient selection or unfair comparisons across providers. In establishing the episode benchmark, current spending would not be a good reference point, given the incentives in FFS to furnish services of marginal value. Two possible ways to establish benchmarks are presented here: Discount FFS payments based on lower PAC and readmission spending or base the amount on resource use (which has been adjusted for differences in wages and special payments) in geographic areas with low spending.

Develop one benchmark for each condition

To encourage lower PAC spending, CMS should establish one episode benchmark for each condition based on patient care needs, not separate benchmarks based on site of service. A uniform (risk-adjusted) payment across PAC

TABLE 3–9

If spending on post-acute care and readmissions were reduced by 10 percent, episode benchmarks for combined hospital–post-acute care bundles would be 5 percent lower than current spending

Condition	Total episode	Illustrative reduced episode benchmark	Percent reduction
Stroke	$22,692	$21,239	6%
Simple pneumonia & pleurisy	12,280	11,720	5
Coronary bypass w/cardiac catheterization	41,791	41,197	1
Heart failure & shock	14,129	13,421	5
Major small & large bowel procedures	23,564	23,089	2
Major joint replacement	22,787	21,903	4
Hip & femur procedures except major joint replacement	35,216	32,969	6
Fractures of hip & pelvis	22,124	20,449	8
Kidney & urinary tract infections	13,770	12,956	6
Septicemia without ventilator 96+ hours	19,056	18,178	5
Average reduction for 10 conditions			5

Note: Post-acute services include services furnished in skilled nursing facilities, home health care, inpatient rehabilitation facilities, and long-term care hospitals. Spending for 90-day inpatient hospital–post-acute care bundles includes payments for initial hospital stay, post-acute care, potentially preventable readmissions, and the physician services furnished during each. We risk adjusted spending using Medicare severity–diagnosis related groups and standardized payments for differences in wages and special payments, such as teaching, disproportionate share, and outlier payments. Reduced episode benchmarks were calculated using 90 percent of spending on readmissions and PAC. Data shown are for potentially preventable readmissions and acuity level 1 patients.

Source: Analysis based on bundled spending prepared by 3M Health Information Systems for MedPAC using 2006–2008 Medicare claims data.

EMBARGOED FOR RELEASE UNTIL 1:00 PM JUNE 4, 2010

settings would encourage providers to find an efficient mix of services and consider the risk of readmission by setting. Setting-specific payments would continue to encourage referrals that do not necessarily reflect a beneficiary's care needs. We found that the explanatory power of a single payment (regardless of setting and including episodes with no PAC) was comparable to Medicare payment systems currently in use (p. 75). This result suggests that any losses and savings associated with the use of high-cost and low-cost settings could be sufficiently averaged out over multiple episodes. Furthermore, benchmarks based on current spending will incorporate the appropriateness of current referral patterns.

Options for setting spending benchmarks for bundle

Establishing a bundle's spending benchmark for an episode of care requires a judgment about where along a spending or cost distribution to set the amount. Current program spending is not a good episode spending benchmark. There is wide variation in the use of PAC; Medicare margins are high in some sectors; PAC is not necessarily furnished in the most efficient setting; readmissions have not, until recently, been discouraged; and the amount of PAC services furnished may reflect biases in the payment systems to furnish therapy services. The Commission has recommended that CMS rebase HHA and SNF payments, redesign the SNF and HHA prospective payment systems, and establish more meaningful criteria for LTCH use.

The level of the benchmarks will determine how hard it will be for providers to keep their spending below them. Benchmarks that reflect large reductions from current FFS spending will require more changes from existing practice patterns than small reductions. At the same time, the size of the withheld amounts or the amount at risk under a shared-risk approach will shape providers' interest in beating the benchmarks. If few dollars are at stake, providers will be less interested in recouping the amount at risk. In combination, the two levers—the benchmarks and the withhold-payments or shared-risk approach—will shape providers' responses to bundled payment.

Base episode benchmark on below-average spending

Bundled payments should give providers an incentive to consider the most efficient mix of services. To strengthen this incentive, CMS could establish episode

TABLE 3–10 **Spending on post-acute care and readmissions in high- and low-spending areas**

Condition	National average	High-spending areas	Low-spending areas	Ratio of high- to low-spending areas
Stroke	$14,528	$16,864	$12,318	1.37
Simple pneumonia & pleurisy	5,603	6,916	4,352	1.59
Coronary bypass w/ cardiac catheterization	5,941	7,045	5,506	1.28
Heart failure & shock	7,079	8,510	5,735	1.48
Major small & large bowel procedures	4,755	5,147	4,331	1.19
Major joint replacement	8,842	10,852	7,047	1.54
Hip & femur procedures except major joint replacement	22,475	24,889	19,145	1.30
Fractures of hip & pelvis	16,754	17,484	14,159	1.23
Kidney & urinary tract infections	8,145	8,979	6,553	1.37
Septicemia without ventilator 96 + hours	8,781	10,895	7,020	1.55
Average for 10 conditions				1.39

Note: Areas were defined using metropolitan statistical areas (MSAs) and statewide rural areas. Post-acute services include services furnished in skilled nursing facilities, home health care, inpatient rehabilitation facilities, and long-term care hospitals. High-spending MSAs were defined as the MSAs making up the top 5 percent of per episode spending. Low-spending MSAs were defined as the MSAs making up the bottom 5 percent of per episode spending. Post-acute care spending is during the 90 days after discharge from the hospital. We risk adjusted spending using Medicare severity–diagnosis related groups and clinical risk groups and standardized payments for differences in wages and special payments, such as teaching, disproportionate share, and outlier payments. Data shown are for potentially preventable readmissions and acuity level 1 patients.

Source: Analysis prepared by 3M for MedPAC using 2006–2008 Medicare claims data.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

spending benchmarks based on spending that is lower than the current national average. For example, episode benchmarks set 5 percent to 10 percent below the current national average would encourage all providers to lower their costs. One variant could be to establish episode benchmarks based on lower PAC and readmission spending. For example, if PAC and readmission spending were lowered by 10 percent, total episode spending would be 5 percent lower (Table 3-9). Lower PAC spending would reflect shifting some beneficiaries to lower cost PAC settings (perhaps some beneficiaries not even receiving PAC) and, within HHAs and SNFs, receiving only those services that are needed. Given the overlapping characteristics of some patients treated in different settings and the growth in SNF care that appears unrelated to patient care needs, these shifts would not likely result in poorer care. Given the variation in readmission rates across providers within and across sectors, a 10 percent reduction in spending associated with readmissions might be an appropriate initial value for the episode benchmark.

Base episode benchmark on spending in low-spending geographic areas

An alternative way to establish the episode benchmark is to consider the variation in spending across geographic areas—called metropolitan statistical areas (MSAs) and statewide rural areas. Episode benchmarks could be based on areas where practice patterns result in low spending relative to the national average. For the 10 conditions examined, we compared risk-adjusted spending on PAC and readmissions across MSAs with the highest and lowest bundle spending (defined by the highest and lowest 5 percent of episodes). This risk adjustment includes the comorbidities of the patient. Across the 10 conditions, PAC spending in MSAs with the highest spending was 39 percent higher than in low-spending MSAs (Table 3-10).

Providers located in markets without high-cost PAC providers (IRFs and LTCHs) may be at an advantage because nationally set rates would include some use of the high-cost settings. Because their own practice patterns do not include the use of these services, the nationally set rate is more likely to exceed their own spending level. Providers in markets with high-cost PAC settings will be under pressure to lower their use of high-cost settings to patterns more in line with national averages.

Table 3-11 (p. 82) provides an illustration of how spending in low-spending areas could be used as inputs to establish episode benchmarks. If spending on PAC and readmissions were lowered to the mean of the national

TABLE 3–11

An illustration of how spending on post-acute care and readmissions in low-spending areas could be used as inputs to setting benchmarks

Condition	National average spending on post-acute care and readmissions	Mean of national average and average low-spending areas	Percent reduction
Stroke	$14,528	$13,423	8%
Simple pneumonia & pleurisy	5,603	4,978	11
Coronary bypass w/cardiac catheterization	5,941	5,724	4
Heart failure & shock	7,079	6,407	9
Major small & large bowel procedures	4,755	4,543	4
Major joint replacement	8,842	7,945	10
Hip & femur procedures except major joint replacement	22,475	20,810	7
Fractures of hip & pelvis	16,754	15,457	8
Kidney & urinary tract infections	8,145	7,349	10
Septicemia without ventilator 96+ hours	8,781	7,901	10

Note: Areas were defined using metropolitan statistical areas and statewide rural areas. Post-acute services include services furnished in skilled nursing facilities, home health care, inpatient rehabilitation facilities, and long-term care hospitals. Post-acute care spending is during the 90 days after discharge from the hospital. Data shown are for potentially preventable readmissions and acuity level 1 patients. We risk adjusted spending using Medicare severity–diagnosis related groups and clinical risk groups and standardized payments for differences in wages and special payments such as teaching, disproportionate share, and outlier payments.

Source: MedPAC analysis based on data prepared by 3M using 2006–2008 Medicare claims data.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

average and the average for low-spending MSAs, spending would be between 4 percent and 11 percent lower than the national average. Other approaches could include setting the benchmark based on spending for MSAs that are lower than the national average. For example, spending could be set at the 40th percentile or some other amount below the mean. Setting the benchmark at a lower point in the distribution would place more pressure on high-spending areas and would result in more areas needing to change their utilization patterns to stay below the benchmark.

Seek to improve risk adjustment

Accurate risk adjustment is key to helping ensure payments do not encourage patient selection or stinting on care and do not place providers at undue risk. Risk adjustment also facilitates fair comparisons across providers, which is particularly important as Medicare moves toward value-based purchasing. With poor risk adjustment, a provider may appear to be less efficient or to have worse quality outcomes when, in fact, the provider differs from its peer group in the mix of cases it treats.

We compared, in an additive way, three risk-adjustment methods: MS–DRGs; the patient's comorbidities recorded during the year before the trigger hospitalization (using clinical risk groups); and, for patients with patient assessment information, functional status at admission to a PAC setting. Information about both comorbidities and functional status improved the ability of the risk-adjustment model to account for the variation in resource use (as measured by charges) across bundles (Table 3-12). Our ability to explain differences increased when a patient's comorbidities were considered in addition to the severity of the hospital stay (from 31 percent to 34 percent). A patient's functional status further improved our ability to explain differences across bundles (to 36 percent). Similar patterns were found when we examined the three risk-adjustment methods using payments, though the r^2 values were higher.[7] These results underscore the importance of adjusting payments for functional status and a patient's comorbidities and gathering consistent patient assessment information across settings, including at hospital discharge. CMS should move toward requiring core elements of the Continuity Assessment Record and Evaluation patient assessment tool to be used in each setting, including at discharge from the hospital.

Continued work on improving risk adjustment, particularly predicting PAC spending, is needed to dampen incentives for providers to avoid certain patients who are likely to require high-cost care. To date, no method—including those currently used to pay providers and Medicare Advantage plans—is perfect and any method is likely to allow some selection.

Alternative approach to bundling: Medicare spending per beneficiary concept

As an alternative to bundling, CMS could adapt the concept of Medicare spending per beneficiary (MSPB). The MSPB is a measure of hospital efficiency that compares each hospital's risk-adjusted spending for its inpatient stays plus 30 days with the national average.[8] Currently, hospitals receive information (by major diagnostic category, such as surgical orthopedic cases) from CMS on their expected versus actual spending for inpatient stays plus 30 days of care. The measure includes spending on PAC, physician services, and readmissions. Although CMS is currently reporting the information to hospitals, it will use the measure in a value-based purchasing program in 2014. A portion of each hospital's performance will be based on whether its per beneficiary spending was above or below the MSPB target.

The big difference between the MSPB approach and bundled payments is that the MSPB establishes a target amount for each hospital and holds it accountable for keeping the average per capita spending (for all services) below it. Other providers (such as PAC providers) are not directly at risk or reward for spending that is above or below the target. Therefore, PAC providers may not gain experience with managing risk across settings and care transitions for beneficiaries. Another difference is that the MSPB target is for a collection of related conditions, such as a major diagnostic category. From a hospital's perspective, this target could coincide with a specific product line such as orthopedic surgery. In contrast, bundled payments and the associated benchmarks consider conditions individually. Performance relative to benchmarks and quality standards may furnish more actionable information to providers.

Implications of bundled payments for beneficiaries

Gains in quality and efficiency under bundling could improve coordination of care, quality, and the care experience of beneficiaries. Ensuring that bundling results in better outcomes would require measures to track outcomes and tie payments to them. To ensure that the goals of bundling are met, providers and the program could take steps to encourage beneficiaries to make choices about where they receive their PAC.

TABLE 3–12

Risk adjustment for all MS–DRGs improves with the addition of patient comorbidities and functional status

Hospital MS–DRG	Comorbidities	Functional status	Ability to explain differences in resource use
×			31%
×	×		34
×	×	×	36

Note: MS–DRGs (Medicare severity–diagnosis related groups). We used charges to measure resource use. Comorbidities were measured using clinical risk groups. Functional status was measured using patient assessment data that were cross-walked and calibrated across assessment instruments (see text box on pp. 70–71). Data shown are 90-day bundles that include inpatient hospital, post-acute care, physician services furnished during institutional care, potentially avoidable readmissions, and acuity level 1 patients.

Source: Analysis prepared by 3M Health Information Systems for MedPAC using 2006–2008 Medicare claims data and functional status data for beneficiaries who used skilled nursing facilities, home health agencies, or inpatient rehabilitation services.

Improved quality and patient experience

Because providers will be at risk for all of the care over a period of time, bundling is likely to result in more coordinated care. Providers would have an incentive to improve their processes for successful transitions across settings and to prepare beneficiaries and their caregivers for the next setting. For example, a family or caregiver is likely to receive more extensive follow-up care and be assigned a care manager who will oversee posthospital care. As a result, beneficiaries are more likely to know who to call with their questions and concerns, a frequent complaint of the fragmented "system" of care they now face. Beneficiaries and their caregivers are likely to receive more information and training about how to manage their condition after discharge from a hospital. Care managers are likely to ensure that follow-up appointments are made and kept. As a result, beneficiaries could experience fewer (and better) transitions between settings and fewer hospital readmissions. Reduced readmissions would avoid the health declines that often accompany a hospital stay.

To track quality under bundled payments, several measures of care coordination and the patient experience could be monitored (Table 3-8, p. 79). These measures include determining the length of time between a patient's discharge from a hospital and initiation of PAC, assessing whether essential clinical information about a patient's hospital stay is transmitted in a timely fashion to the PAC

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

provider, and determining how quickly patients are seen by their community-based physician after the hospital stay that initiated the bundled episode. Measures of unplanned readmissions and ED use may also reflect poor care coordination or failure of providers to communicate during care transitions.

Medicare could measure patients' experience of care by adopting or adapting selected elements from existing Consumer Assessment of Healthcare Providers and Systems® (CAHPS®) surveys, such as the Hospital CAHPS, the Home Health Care CAHPS, and the CAHPS Clinician & Group Surveys. While patient experience measures are inherently subjective, they capture an important patient-centered dimension of quality that is not available from other sources (Medicare Payment Advisory Commission 2004). Measures could include beneficiaries' perceptions of how well their pain was managed, whether their providers communicated effectively with them (e.g., answered their questions), and whether beneficiaries were included in treatment decisions and the planning of their care.

Under bundled payments, all providers will have an incentive to ensure that their care does not result in readmissions, which would undercut their ability to keep spending below benchmarks. PAC providers will have an additional incentive to maintain or grow their referrals from hospitals by having low readmission rates. To reinforce these incentives, CMS could tie whether providers keep their withheld amounts or share in savings to achieving certain minimum quality standards in addition to meeting benchmarks.

Aligning beneficiary decisions with the goals of bundling

Under bundled payments, beneficiary behavior plays a key role in whether providers and the program realize the goals of bundled payments. Beneficiaries' choice of providers is a cornerstone of Medicare but is influenced by providers. Providers could seek to influence these choices by giving beneficiaries information about the quality of PAC providers and offering additional care management services beneficiaries currently may not receive. The program could tie a portion of a provider's payments to achieving quality standards, raising the conditions of participation to exclude the lowest quality providers, or raising cost sharing for beneficiaries who do not go to the recommended PAC setting.

Current Medicare policies require beneficiaries to have the freedom to choose their providers. Selection of the PAC site reflects recommendations made during the hospital discharge process and beneficiary preference, subject to Medicare's rules for coverage and a PAC provider's willingness or ability to serve a beneficiary. Preserving beneficiaries' choice will be important in any bundling initiative. Although providers may not establish formal networks, under bundled payments, hospitals and doctors would have an incentive to refer beneficiaries to the PAC providers that best meet the bundle's goals for efficiency and cost.

Providers may rely on providing beneficiaries with information to shape their choice of providers. Current choices are heavily influenced by physicians and discharge planners. To help guide decision making, hospitals could furnish information on the quality of PAC providers. CMS could supply referring hospitals with risk-adjusted measures that would help inform beneficiaries' choice of providers. This information is likely to be better understood by beneficiaries when delivered and explained by their provider and could shift beneficiaries' use away from poor-quality providers. Shared decision-making tools may be useful in ensuring that beneficiaries fully understand their PAC choices and the implications of choosing one PAC setting over another.

Providers could influence beneficiaries' choices by offering care management services if beneficiaries elect to use a specific set of providers. Such an option would provide beneficiaries with services that might not be available from other PAC providers, such as assigning a nurse or other health professional to follow a beneficiary across the span of care, improved patient education practices, and expanded efforts at medication reconciliation (Coleman et al. 2006, Naylor et al. 2011). In experimental trials, patients who are offered these services overwhelmingly accept them, suggesting that beneficiaries would prefer these services if they were made available under bundling. Providers would have an incentive to furnish these services if the services lowered the risk of readmissions or allowed beneficiaries to be placed in lower cost PAC settings. Providers may decide to incur the cost of such services to raise the likelihood that their total episode spending will be below the benchmark.

The program can also adopt policies that reinforce choices about cost-effective high-quality care. In the near term, Medicare could tie the at-risk payments to quality outcomes. Providers would have a financial

EMBARGOED FOR RELEASE UNTIL 12:00PM JUNE 14, 2013

incentive to achieve and maintain high-quality care. In the future, broader reforms could be considered. Medicare could revise its conditions of participation to include higher quality standards. In setting higher standards, Medicare could exclude the poorest quality providers from participating in the program. The program could also consider basing cost sharing on the recommended course of PAC care. Beneficiaries who followed the recommendation would have little or no cost sharing, while those who opted for a different choice would be subject to higher cost sharing. Beneficiaries would retain choice about where to receive their care, but their choices could cost them more. So that these decisions do not simply shift costs to beneficiaries, it is essential to ensure that beneficiaries understand how differences in their cost sharing are related to their election to use providers and settings most likely to produce the best clinical results.

Conclusion

Bundled payments are one way to begin to change the delivery system away from the fragmented care that results from FFS and toward shared accountability that encourages care coordination and cost control during an episode of care. Bundled payments would give providers a way to gain experience in managing care that extends beyond their narrow purview and across a spectrum of providers and settings. Because bundles would span episodes of care (not an entire year) and include a less complete set of services, they would require providers to assume different risks than they would in ACOs. As a result, bundling is a more practical option for many providers, but at the same time it limits what they are likely to accomplish.

The specific design of bundles will shape the risk for providers and the opportunities for care coordination. Long, inclusive bundles will lead to coordinated care over more services for longer periods of time but entail greater risk (and reward) for providers compared with short, more narrowly defined bundles. The level of the benchmark and the mechanism used to encourage cost-effective care (such as a withheld portion of the payment or a shared-risk approach) together will shape the pressure exerted on providers to change their current practice patterns. We illustrated the trade-offs inherent in the design decisions with one configuration, but many variants of this design are possible, each with its own strengths and weaknesses. Over the next year, the Commission plans to continue its conversation about how best to proceed with this potential payment reform. ■

EMBARGOED FOR RELEASE UNTIL 10:00 AM JUNE 14, 2013

Endnotes

1 Model 1 and Model 4 exclude PAC. Model 1 covers only an inpatient stay and requires an entity to take a discounted diagnosis related group payment for all diagnosis related groups in exchange for allowing gainsharing with physicians. Model 4 bundles include an inpatient stay, related readmissions, and physician services associated with the inpatient services.

2 Model 2 participants in the no-risk phase include 55 entities and 192 health care organizations; Model 3 participants in the no-risk phase include 14 entities and 165 health care organizations.

3 CMS implemented the hospital readmissions reduction program in October 2013. The program reduces payments to hospitals that have excess readmissions for three conditions (acute myocardial infarction, pneumonia, and heart failure). Each hospital's individual risk is limited in fiscal year 2013 because its total penalty is capped at 1 percent of inpatient base operating payments. The cap increases to 2 percent in 2014 and to 3 percent in 2015, and it stays at 3 percent thereafter.

4 Across the 10 conditions, SNFs and IRFs had the same readmission rates (24 percent) and HHAs had lower readmission rates (18 percent), though these rates varied by condition. IRFs had higher readmission rates (20 percent higher) than SNFs for beneficiaries with pneumonia, kidney and urinary tract infections, and sepsis. SNFs had similarly higher rates than IRFs for patients with stroke, major bowel procedures, and hip fractures. While HHAs had lower rates on average compared with other settings, their readmission rates were similar for beneficiaries with kidney and urinary tract infections or septicemia and those who were recovering from major bowel procedures.

5 The variation in bundle spending as measured by payments under the combined hospital–PAC bundle designs was higher than measured using charges. The r^2 values for the payment models were as follows: 62 percent for the 30-day bundle including readmissions, 67 percent for the 30-day bundle excluding readmissions, 45 percent for the 90-day bundle including readmissions, and 53 percent for the 90-day bundle excluding readmissions. The r^2 values for payments are higher than those for charges because they are driven by the use of MS–DRGs (which are used to set hospital payments) to explain the combined hospital–PAC bundle spending.

6 The Measure Applications Partnership is a public–private partnership convened by the National Quality Forum for providing input to the Department of Health and Human Services on selecting performance measures for public reporting, performance-based payment programs, and other purposes.

7 The ability to explain spending using payments found similar patterns, with higher r^2 values for reasons discussed in endnote 5. MS–DRGs alone explained 43 percent of the variation in payments. Adding comorbidities (as captured using clinical risk groups) raised this amount to 45 percent, and adding functional status raised the explanatory power to 51 percent.

8 Spending is risk adjusted using MS–DRGs, age, hierarchical condition categories, disability and end-stage renal disease status, and long-term care residence. Spending includes outlier payments and is adjusted for differences in wage levels and mix of cases but excludes payments for indirect medical education and disproportionate share hospitals.

EMBARGOED FOR RELEASE UNTIL 10AM JUNE 14, 2013

References

3M Health Information Systems. 2013a. *The ability of event-based episodes to explain variation in charges and Medicare payments for various post-acute service bundles.* Salt Lake City, UT: 3M Health Information Systems.

3M Health Information Systems. 2013b. *The impact of disability measures on expected Medicare payments and expected provider charges for event-based episodes that include post-acute care.* Salt Lake City, UT: 3M Health Information Systems.

Assistant Secretary for Planning and Evaluation, Department of Health and Human Services. 2008. *Examining relationships in an integrated hospital system.* Report prepared by staff from RTI International for the Office of the Assistant Secretary for Planning and Evaluation. Project number 0208665.002.001. Washington, DC: ASPE.

Buntin, M. B., A. D. Garten, S. Paddock, et al. 2005. How much is postacute care use affected by its availability? *Health Services Research* 40, no. 2 (April): 413–434.

Center for Medicare and Medicaid Innovation, Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2013. Bundled payments for care improvement: Phase 1 participant webinar series—Session one: Candidate quality metrics. January 24.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2013a. BPCI Model 2: Retrospective acute & post acute care episode. http://www.cms.gov/initiatives/BPCI-Model-2/index.html.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2013b. BPCI Model 3: Retrospective post acute care only. http://www.cms.gov/initiatives/BPCI-Model-3/index.html.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2011. Bundled Payment for Care Improvement Initiative: Request for application. http://www.cms.gov/initiatives/Bundled-Payments/bpci-archive.html.

Coleman, E. A., C. Parry, S. Chalmers, et al. 2006. The care transitions intervention: Results of a randomized controlled trial. *Archives of Internal Medicine* 166, no. 17 (September 25): 1822–1828.

Dobson, A., J. E. DaVanzo, S. Heath, et al. 2012. *Medicare payment bundling: Insights form claims data and policy implications.* Report prepared by Dobson DaVanzo for the American Hospital Association and Association of American Medical Colleges. Chicago, IL: AHA. http://www.aha.org/content/12/ahaaamcbundlingreport.pdf.

Epstein, A. M., A. K. Jha, and E. J. Orav. 2011. The relationship between hospital admission rates and rehospitalizations. *New England Journal of Medicine* 365, no. 24 (December 15): 2287–2295.

Gage, B., M. Ingber, M. Morley, et al. 2009. *Identifying the logic to assign PAC claims and rehospitalizations to episodes of care for comparing relative resource use.* Report prepared by staff from RTI International for the Centers for Medicare & Medicaid Services. Baltimore, MD: CMS. http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Reports/downloads/Gage_FinalReport_2009.pdf.

Gage, B., L. Smith, M. Morley, et al. 2011. *Post-Acute Care Payment Reform Demonstration: Report to Congress supplement—Interim report.* Prepared under contract to the Centers for Medicare & Medicaid Services, Department of Health and Human Services. Baltimore, MD: CMS.

Goldfield, N. I., E. C. McCullough, J. S. Hughes, et al. 2008. Identifying potentially preventable readmissions. *Health Care Financing Review* 30, no. 1 (Fall): 75–91.

Hughes, J. S., R. F. Averill, J. Eisenhandler, et al. 2004. Clinical risk groups (CRGs): A classification system for risk-adjusted capitation-based payment and health care management. *Medical Care* 42, no. 1 (January): 81–90.

Hussey, P. S., M. E. Sorbero, A. Mehrotra, et al. 2009. Episode-based performance measurement and payment: Making it a reality. *Health Affairs* 28, no. 5 (September–October): 1406–1417.

Institute of Medicine. 2013. *Interim report of the Committee on Geographic Variation in Health Care Spending and Promotion of High-Value Care: Preliminary committee observations.* Washington, DC: The National Academies Press.

Long-term Quality Alliance. 2011. *Quality measurement workgroup report: Measurement opportunities and gaps – transitional care processes and outcomes among adult recipients of long-term services and supports.* Washington, DC: LTQA. http://www.ltqa.org/wp-content/themes/ltqaMain/custom/images/TransitionalCare_Final_122311.pdf.

Mallinson, T. R., A. Deutsch, and A. W. Heinemann. 2012. Comparing function across post-acute rehabilitation settings after co-calibration of self-care and mobility. ACRM–ASNR Annual Conference, October 13, 2012, Vancouver, Canada.

Medicare Payment Advisory Commission. 2012. *Report to the Congress: Medicare payment policy.* Washington, DC: MedPAC.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Medicare Payment Advisory Commission. 2011. *Report to the Congress: Regional variation in Medicare service use.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2010. *Report to the Congress: Medicare payment policy.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2008. *Report to the Congress: Reforming the delivery system.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2007. *Report to the Congress: Promoting greater efficiency in Medicare.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2005. *Report to the Congress: Medicare payment policy.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2004. *Report to the Congress: Medicare payment policy.* Washington, DC: MedPAC.

Mitchell, J. M. 2010. Effect of physician ownership of specialty hospitals and ambulatory surgery centers on frequency of use of outpatient orthopedic surgery. *Archives of Surgery* 145, no. 8 (August): 732–738.

National Quality Forum. 2012. *Coordination strategy for post acute care and long-term care performance measurement: Final report.* Washington, DC: NQF.

Naylor, M. D., L. H. Aiken, E. T. Kurtzman, et al. 2011. The care span: The importance of transitional care in achieving health reform. *Health Affairs* 30, no. 4 (April): 746–754.

Pham, H. H., P. B. Ginsburg, T. K. Lake, et al. 2010. *Episode-based payments: Charting a course for health care payment reform.* Washington, DC: National Institute for Health Care Reform.

Sood, N., P. J. Huckfeldt, J. J. Escarce, et al. 2011. Medicare's bundled payment pilot for acute and postacute care: Analysis and recommendations on where to begin. *Health Affairs* 30, no. 9 (September): 1708–1717.

Stensland, J., and A. Winter. 2006. Do physician-owned cardiac hospitals increase utilization? *Health Affairs* 25, no. 1 (January–February): 119–129.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

CHAPTER 4

Refining the hospital readmissions reduction program

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

CHAPTER 4

Refining the hospital readmissions reduction program

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Chapter summary

In 2008, the Commission reported on a series of payment reforms to encourage care coordination among physicians, hospital administration, and providers outside the hospital. These initiatives included testing the bundling of payments around an episode, gainsharing between hospitals and physicians, and a direct incentive to reduce hospital readmissions. While not all readmissions can be prevented, there is a concern that Medicare readmission rates have consistently been too high and could be lowered through greater coordination of care.

Following the Commission's report and a series of studies illustrating the problem of readmissions, the Congress enacted a readmissions reduction program in 2010. The program includes a penalty that eventually reduces Medicare payments in 2013 to hospitals that had above-average readmission rates from July 1, 2008, through June 30, 2011. There was a small decline in risk-adjusted readmission rates, with the condition-adjusted readmission rate declining by roughly 0.7 percentage point from 2009 to 2011. CMS has reported further improvements from 2011 to 2012 (Blum 2013). While readmission rates have declined slightly, 12.3 percent of all 2011 Medicare admissions were still followed by a potentially preventable readmission (using the 3M algorithm discussed in the online appendix to this chapter, available at http://www.medpac.gov). The rates ranged from 9.9 percent for the hospital at the 10th percentile of the distribution to 15.3 percent at the 90th percentile

In this chapter

- Introduction
- Recent trends in efforts to reduce readmission rates
- HRRP increased the incentive to reduce readmissions
- Impact of the HRRP on provider payments
- Addressing long-term issues with the readmission policy
- Conclusions and implications for future research

of the distribution. Continued financial incentives can play a role in bringing these rates down further. As we have seen, the readmission policy has pushed hospitals to look beyond their walls and improve care coordination across providers to reduce readmissions. Given the positive effects of financial incentives, the Commission finds the policy should be refined and continue.

The current readmission penalty is one step forward in a series of steps to improve care coordination and care outcomes for Medicare patients. However, computation of readmissions rates and of the penalty could be refined to address four issues with the current policy:

- Aggregate penalties remain constant when national readmission rates decline.
- Single-condition readmission rates face significant random variation due to small numbers of observations.
- Heart failure readmission rates are inversely related to heart failure mortality rates.
- Hospitals' readmission rates and penalties are positively correlated with their low-income patient share.

In this chapter, we discuss ways to overcome these four issues. Several principles guided our work. First, any change should maintain or increase an average hospital's incentive to reduce readmissions. We want to encourage hospitals to continue to work with providers outside the hospital's walls to improve care transitions and reduce readmissions. Second, a policy change ideally would increase the share of hospitals that have an incentive to reduce readmissions. Currently, low-volume hospitals do not have much incentive to invest in reducing readmissions because of the way their readmission rates are computed. In addition, some hospitals that face the maximum penalty may not believe they can reduce readmissions enough to lower the penalty. Third, we want penalties to be a constant multiple of the costs of readmissions; in this way, lower readmission rates would benefit both patients (by avoiding readmissions) and hospitals (by incurring lower penalties). Fourth, policy revisions should not cause increased Medicare spending relative to current law. The end goal is to see a decline in readmissions, a decline in the penalties hospitals pay, and a decline in Medicare spending on readmissions.

Specifically, we discuss ways to:

- Have a fixed target for readmission rates. Penalties would go down when industry performance improves.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

- Use an all-condition readmission measure to increase the number of observations and reduce random variation.
- Use an all-condition readmission measure to limit the concerns regarding the inverse relationship between heart failure mortality rates and readmission rates. In the longer term, we could pursue a joint readmission–mortality measure.
- Evaluate hospital readmission rates against a group of peers with a similar share of poor Medicare beneficiaries as a way to adjust readmission penalties for socioeconomic status.

These actions would require legislative changes because the current formula used to compute the readmissions penalty is set in law. ■

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

Introduction

In 2008, the Commission reported on a series of payment reforms to encourage care coordination among physicians, hospital staff, and providers outside of hospitals (Medicare Payment Advisory Commission 2008). Those initiatives include testing payment bundling around an episode of care and a direct incentive to reduce readmissions. The Commission also recommended giving hospitals and physicians the option of setting up gainsharing arrangements to share in savings that result from improved processes of care that benefit patients and reduce costs. These initiatives were designed to give providers an incentive to coordinate care in ways that improve quality and reduce the cost of services.

While no hospital employee or physician wants to see patients readmitted, there was a concern that too few resources were put into reducing readmissions. In particular, there was a concern that hospital employees and physicians were not spending time to coordinate care with post-acute care providers and primary care physicians. Readmission penalties are a way to encourage providers to take responsibility for the continuity of care provided to their patients.[1]

Following the Commission's 2008 recommendations, the Congress enacted a readmission penalty as part of the Patient Protection and Affordable Care Act of 2010. CMS implemented the hospital readmissions reduction program (HRRP) in October 2012. The HRRP reduces payments to hospitals that had excess readmissions during the prior three years and thereby creates an incentive for hospitals to improve coordination of care and reduce readmissions starting in 2010. The aggregate amount of penalties across hospitals in 2013 will be equal to 0.3 percent of aggregate operating payments. Each hospital's individual risk is limited in fiscal year 2013 because its total penalty is capped at 1 percent of inpatient base operating payments. The cap increases to 2 percent in 2014 and to 3 percent in 2015; it stays at 3 percent thereafter.

There is evidence that readmission rates are too high in the United States and can be lowered. Historically, almost 19 percent of Medicare discharges were followed by a readmission within 30 days (Jencks et al. 2009). Since implementation of the readmission penalty in 2013, there has been a flurry of activity within hospitals and the academic community regarding readmissions. Several hospital-initiated efforts suggest there is room for improvement in readmission rates (Jack et al. 2009, McCarthy 2012, Rennke et al. 2013, Robert Wood Johnson Foundation 2013a, Robert Wood Johnson Foundation 2013b). International comparisons similarly suggest a need for improvement. For example, 30-day postdischarge readmission rates for ST segment elevation myocardial infarction were 68 percent higher in the United States than the average for European countries from 2006 through 2008 (Kociol et al. 2012). While there is room for improvement, there remains a question of how to best motivate that improvement.

After the Commission's 2008 recommendation was published and readmission rates were publicly reported, there has been a strong upsurge in hospitals' efforts to reduce readmissions. These efforts include improving the process within the hospital to reduce complications as a way to indirectly prevent readmissions (Silow-Carroll et al. 2011); scheduling follow-up visits, reconciling medications before discharge, and utilizing case managers for complex cases (Jack et al. 2009, Kanaan 2009); and providing better transition planning and execution through enhanced communication among providers and encouraging patient education and self-management (Naylor et al. 2011). For patients with low cognitive function or poor health literacy, hospitals have bolstered their efforts by creating a postdischarge plan that is comprehensible to both patient and caregiver and offering the guidance of a health coach (Chugh et al. 2009, Parry and Coleman 2010). Some hospitals have focused on coordination with skilled nursing facilities, rehabilitation facilities, and other post-acute care providers and have supported interventions by pharmacists, home health nurses, and skilled nursing facilities to prevent further hospitalizations after a patient has been discharged (Bellone et al. 2012, Kanaan 2009).

The benefits of a program to reduce readmissions accrue to both the beneficiary and the Medicare program. The benefits for the patient are improved care in the hospital, more help transitioning from the hospital to other settings, better coordination among the patient's providers outside the hospital, and avoiding an unnecessary hospital stay. Recent literature suggests "In old age, cognitive functioning tends to decline substantially after hospitalization even after controlling for illness severity and pre-hospital cognitive decline" (Rockwood 2012, Wilson et al. 2012). Therefore, avoiding an unnecessary hospital stay may be good in itself. We cannot quantify the benefit to the patient, although a "healthy days at home" measure may be a useful indicator.[2]

EMBARGOED FOR RELEASE UNTIL 4 PM JUNE 14, 2013

TABLE 4–1 **Hospital readmission rates across all conditions declined from 2006 to 2011**

Readmission measure	All-condition readmission rate						Percentage point change in readmission rate	
	2006	2007	2008	2009	2010	2011	2006–2008	2009–2011
All cause	16.0%	16.1%	15.7%	15.6%	15.5%	15.3%	–0.3	–0.3
PPR	13.4	13.2	13.0	13.0	12.5	12.3	–0.4	–0.7

Note: PPR (potentially preventable readmission). Readmission rates reflect the shift in patients admitted to hospitals and their likelihood to be readmitted within 30 days after controlling for age, sex, and diagnosis related group. Raw readmission rates without any exclusions for planned readmissions or readmissions on readmissions had an average rate of roughly 19 percent. All-cause readmissions reflect all readmissions across all conditions for any cause. To make the all-cause measure comparable to the PPR measure, we excluded any "chains" of readmissions, meaning we counted only one readmission if a person was readmitted multiple times within 30 days. Readmissions are for all Medicare patients at all hospitals paid under the inpatient prospective payment system.

Source: MedPAC analysis of 2006 to 2011 Medicare claims files.

The benefit to the Medicare program can be quantified and has two parts: forgone spending on the avoided readmissions and any revenue from penalties on hospitals with excessive readmission rates. The latter, in terms of financial benefits, is far less substantial than the former. Under the current policy, penalties of about $300 million will accrue in 2013, whereas potential savings from reducing avoidable readmissions by even 10 percent would achieve savings of $1 billion or more. In this case, better outcomes align with greater savings: That is, the good outcome for the patient (avoiding unnecessary readmissions) is also the best financial outcome for the Medicare program.

Hospitals clearly want to improve care and reduce readmissions. However, there is a concern that in the competition for limited hospital resources, hospitals may choose to allocate funds to revenue-generating or market-share-expanding projects rather than readmissions reduction projects that result in lower hospital revenue. For hospitals to have an effective financial incentive to reduce readmissions, the penalty for not meeting reduction targets would have to be greater than the incremental cost of reducing readmissions and the lost marginal profit from those readmissions. The current penalty structure has a strong incentive to fund proven strategies that can reduce excess readmissions for target populations in the three conditions covered by the policy. Any refinements to the readmission policy should be done so that the penalty for excess readmissions continues to be large enough to induce hospitals to spend funds to improve the quality of care in ways that also reduce the hospitals' readmissions revenues.

Recent trends in efforts to reduce readmission rates

In June 2008, the Commission evaluated Medicare readmissions using a 3M algorithm that separates readmissions into those that are deemed unrelated to the prior admission and those that possibly could have been prevented. The finding from this methodology is that roughly 13 percent of all 2009 admissions were followed by a readmission that could possibly have been prevented. While these readmissions are potentially preventable, it does not mean that they can all be prevented or that we expect readmission rates to fall to zero (3M Health Information Systems 2008).[3] However, we do believe that a significant share of potentially preventable readmissions can be prevented and the average readmission rates can be lowered. A look at readmission rates over a recent five-year period shows that rates across acute care hospitals have declined slightly. Table 4-1, based on our analysis of Medicare claims data, shows the trend from 2006 to 2011 for readmissions for all Medicare patients at all hospitals paid under the inpatient prospective payment system (IPPS). The readmission rate in this analysis is an "all-condition" measure, which means the rate is for all patients discharged regardless of the diagnosis under which they were admitted or discharged.[4] The rates were adjusted for changes in patient demographics (age and sex) and diagnosis related group (DRG) over the years. If rates are not adjusted, a shift in patient mix could affect the underlying aggregate readmission rate and mask any improvement or degradation in hospital performance.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

TABLE 4–2 **Hospital readmission rates for three conditions declined from 2009 to 2011**

Readmission measure	2009	2010	2011	Percentage point change 2009–2011
All cause				
AMI	22.0%	21.4%	21.3%	–0.7
Heart failure	24.9	24.7	24.2	–0.6
Pneumonia	17.5	17.2	17.0	–0.5
PPRs				
AMI	17.7	17.0	16.6	–1.1
Heart failure	19.8	19.2	18.8	–1.0
Pneumonia	13.2	12.8	12.5	–0.7

Note: AMI (acute myocardial infarction), PPR (potentially preventable readmission). The Yale–CMS method was used to compute all-cause data on an annual (not 3 year) basis. All-cause readmissions reflect all readmissions across all conditions for any cause. The 3M method was used to calculate PPR data. Readmission rates reflect the mix of patients admitted to hospitals and their likelihood to be readmitted within 30 days after controlling for age, sex, and diagnosis related group. Readmissions are for all Medicare patients at all hospitals paid under the inpatient prospective payment system.

Source: MedPAC analysis of 2009 to 2011 Medicare claims files.

EMBARGOED FOR RELEASE UNTIL 1:00 PM JUNE 14, 2013

As shown in Table 4-1, we examined the data from two perspectives. The first is an all-cause readmission measure across all conditions for any cause; it does not try to distinguish between potentially preventable readmissions and other readmissions. It reflects the first readmission after an index readmission and is adjusted for type of admission. The all-cause adjusted readmission measure shows a decline from a rate of 16.0 percent in 2006 to 15.3 percent in 2011.

Starting in 2009, the Medicare Hospital Compare website began publishing readmission rates for three conditions (acute myocardial infarction (AMI), heart failure, and pneumonia). In addition, the HRRP, passed in 2010, signaled hospitals' need to prepare for implementation of the penalty provision in 2013. One might conclude that the incentive to decrease readmission rates would be greater in the latter period. However, we found that the decline from 2009 to 2011 was similar to the decline in earlier years (2006–2008), at 0.3 percent.

The second measure we used to examine readmission rates is labeled in Table 4-1 as potentially preventable readmission (PPR). It counts only those readmissions that the algorithm (which was developed by panels of physicians) considers to be potentially preventable. By this measure, there was a greater decline in the readmission rate (in absolute and relative terms) and the decline was greater in the 2009 to 2011 period. By 2011, the average PPR was 12.3 percent, with the hospital at the 10th percentile having a rate of 9.9 percent and the hospital at the 90th percentile having a rate of 15.3 percent. Depending on which measure one uses, the pace of improvement has either stayed the same or increased through 2011. Recently, CMS reported that rates fell further from 2011 to 2012; we have not examined those data (Blum 2013).

Hospital Compare reports hospital-specific readmission rates for three conditions: AMI, heart failure, and pneumonia. These conditions are of interest not only because they are common conditions with relatively high readmission rates but also because they are the three conditions specified in the readmission policy beginning in October 2012. Recent press reports have shown little change in these measures (Rau 2012). These analyses, however, fail to account for changes in the mix of patients over time and use a three-year average of the readmission rate. A three-year average is necessary at the hospital level to help generate enough cases to be statistically valid; in contrast, at the national level, annual rates can be computed to evaluate recent changes in readmissions. Table 4-2 shows how annual readmission rates have changed for these three conditions at the national level after controlling for patient age, sex, and DRG.

Using the all-cause measure for the three conditions reported by CMS (but adjusted for type of DRG within the diagnosis), each of the three reported conditions had

a larger decrease in readmission rates from 2009 to 2011 than the –0.3 average for all conditions. This result could reflect the effect of public reporting and possibly the prospect of the HRRP on hospital behavior. Notably, PPRs decreased more than all-cause readmissions from 2009 to 2011 (Table 4-2). The bigger drop in PPRs could suggest that most of the decline in readmissions came from a reduction in PPRs, which could lend some face validity to the identification of those readmissions as potentially preventable. One would expect that hospitals could more readily prevent readmissions that are potentially preventable than those that may be planned or unrelated to the index admission.

HRRP increased the incentive to reduce readmissions

With passage of the HRRP in 2010, hospitals that have an excess number of Medicare readmissions for selected conditions in the prior three years will have their IPPS payments reduced (hospitals not paid under IPPS, such as critical access hospitals, are not subject to the policy). In fiscal years 2013 and 2014, the readmissions reduction program applies to three conditions: AMI, heart failure, and pneumonia. In fiscal year 2015, the program will be expanded to at least four additional conditions, including chronic obstructive pulmonary disease, coronary artery bypass graft surgery, percutaneous transluminal coronary angioplasty, and other vascular conditions as well as other conditions the Secretary deems appropriate. The penalty is computed based on readmission rates for the most recent three years of data available; therefore, the 2013 penalties were based on data for 2009, 2010, and 2011.

A hospital's readmission performance is measured using the National Quality Forum (NQF)–endorsed risk-adjusted 30-day readmission measures for AMI, heart failure, and pneumonia. The 30-day measure is essentially the same measure as reported on the Hospital Compare website, except that readmissions to Veterans Health Administration hospitals and critical access hospitals are not included.

- Risk adjustment is based on the use of hierarchical regression models using selected hierarchical condition categories to adjust for patient characteristics.
- Measures are for all-cause readmissions for beneficiaries age 65 or older with limited exclusions, such as planned readmissions for patients with AMI.
- Three years of claims data—July 2008 through June 2011—are aggregated to judge hospitals' readmission performance.
- Hospitals must have at least 25 initial admissions for a given diagnosis to be measured.
- Conditions identified are based on the principal discharge diagnosis, which is not necessarily the DRG assigned to the case for payment.

Under the HRRP, hospitals that have Medicare risk-adjusted readmission rates for any of the three conditions greater than the national average rates for those conditions (defined as "excess" readmissions) will have their 2013 IPPS payment rates reduced. The payment penalty will be collected by implementing a payment reduction for all Medicare discharges. The penalty is calculated as a percentage of a hospital's base operating payments and therefore does not reduce hospitals' indirect medical education, disproportionate share hospital (DSH), special rural (e.g., sole community), or outlier payments.

The current readmission penalty formula is complex, but in essence the penalty is computed as the product of a hospital's adjusted cost of excess readmissions and a multiplier. Usually, excess readmissions would be computed as the difference between a hospital's observed readmissions and its expected number of readmissions, given the riskiness of the hospital's patient population. However, the current method for computing excess readmissions does not use the actual observed number of readmissions; instead, it compares the hospital's adjusted number of readmissions with the expected number. The adjusted number is essentially a blend of the hospital's actual observed readmissions for a condition and the national mean readmission rate for the condition, with a larger weight placed on the national mean for smaller hospitals. The reason the current method uses the adjusted number is to limit the effect of random variation in hospitals with small numbers of cases.

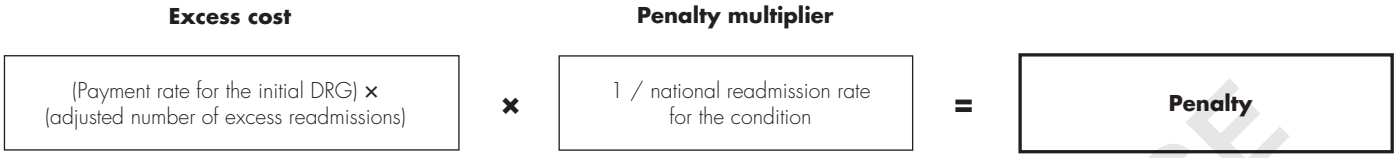
Figure 4-1 shows a simplified version of the readmission penalty formula.

For illustrative purposes, consider a hospital with 100 admissions in a DRG for which the national average rate of readmissions is 20 percent. The hospital's expected number of readmissions would be 20. If the hospital's actual number of readmissions were 24 and its adjusted

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

FIGURE 4–1

Computation of hospital readmission penalty



Note: DRG (diagnosis related group). The derivation of this simplified formula is shown in online Appendix 4-B to this chapter, available at http://www.medpac.gov.

number of readmissions were 22, then the number of excess readmissions would be 2. If the base DRG payment per initial admission were $10,000, the estimated cost of excess readmissions would be $20,000.[5] The second box in Figure 4-1 represents a multiplier that increases the incentive to reduce readmissions. For example, given a 20 percent national average readmission rate for a condition, the multiplier would be 5 (1/0.20). The penalty would be equivalent to five times the cost of the adjusted excess readmissions, or $100,000 in this example. In general, the formula produces penalties that are much higher than Medicare payments for the excess readmissions; this creates a strong incentive to reduce readmissions. However, the full impact of the formula is limited because the penalty is limited to three conditions, and each hospital's penalty is capped at 1 percent of base inpatient operating payments in 2013, 2 percent in 2014, and 3 percent in 2015 and thereafter. The algebra showing that the penalty in law is equivalent to the simplified formula in Figure 4-1 is shown in online Appendix 4-B to this chapter, available at http://www.medpac.gov.

Impact of the HRRP on provider payments

Under current policy, we estimate that the penalty will reduce hospital payments by approximately $300 million, equal to 0.3 percent of base inpatient operating payments for all IPPS hospitals. Roughly 30 percent of all hospitals receive no penalty, 60 percent receive a penalty of less than 1 percent, and 10 percent of hospitals receive the maximum penalty, which was 1 percent in 2013.

To examine how the HRRP's penalties vary by hospital group, we examined a sample of 3,006 hospitals that had three years of complete data and over 1,000 total Medicare discharges across all conditions (Table 4-3, p. 100). We found major teaching hospitals have the highest average penalty at 0.45 percent of base operating payments and also have the largest share of hospitals at the penalty cap at 18 percent. In contrast, hospitals that receive no indirect medical education and no DSH payments have smaller average penalties at 0.24 percent, with 40 percent receiving no penalty and just 7 percent at the 1 percent penalty cap. Small hospitals, those with fewer than 100 beds, also have a lower average penalty, 0.28 percent with 39 percent receiving no penalty at all. The larger share of small hospitals receiving no penalty is in part due to these hospitals being less likely to have the minimum 25 AMI cases that make them subject to a potential penalty.

Despite these rather large differences in the readmission penalty as a share of base operating payments, the differences as a share of total payments are much smaller. This is because hospitals that are more likely to receive higher penalties also are more likely to receive higher supplemental payments such as indirect medical education, DSH, and outlier payments. Thus, payment reduction across hospitals does not vary much, ranging from 0.22 percent for government hospitals to 0.28 percent for major teaching hospitals.

A hospital's financial incentive to direct resources to reducing readmissions depends on the size of the penalty relative to the lost marginal profit from readmissions. At present the size of the penalty is significant for the three conditions measured but relatively small overall because the readmission program is computed on only three conditions and is capped at 1 percent. As the number of conditions expands, the size of the penalty will increase.

EMBARGOED FOR RELEASE UNTIL 11:00AM JUNE 14, 2013

TABLE 4–3 **Hospitals affected by readmission payment penalty, 2008–2010**

Hospital group	Average penalty* as a share of operating payments	Share of hospitals at 1% penalty cap	Share of hospitals with no penalty	Average payment reduction* as a share of all payments
All	0.31%	10%	29%	0.24%
Urban	0.30	9	28	0.23
Rural	0.34	13	33	0.28
Nonprofit	0.31	10	31	0.24
For profit	0.33	10	25	0.26
Government	0.30	10	29	0.22
Major teaching	0.45	18	11	0.28
Other teaching	0.27	7	31	0.21
Nonteaching	0.31	10	31	0.25
IME and DSH	0.33	10	25	0.23
IME only	0.29	7	30	0.25
DSH only	0.32	11	29	0.26
No IME or DSH	0.24	7	40	0.22
Number of beds				
< 100	0.28	10	39	0.24
100–299	0.32	10	23	0.22
300+	0.33	10	27	0.28
Occupancy rate				
< 50%	0.28	9	37	0.22
50%–75%	0.31	9	27	0.24
75%+	0.43	15	16	0.31

Note: IME (indirect medical education), DSH (disproportionate share hospital).
*Average penalty is computed as a share of base operating payments and average payment reduction is computed as a share of total inpatient payments, which include IME payment, DSH payments, and outliers. Averages are based on hospital weighted averages. Analysis is limited to the 3,006 inpatient prospective payment system hospitals with at least 1,000 discharges from 2008 through 2010.

Source: MedPAC analysis of 2010 Medicare claims and October 3, 2012, CMS readmission impact file.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Addressing long-term issues with the readmission policy

The purpose of the hospital readmission policy is to create an incentive for hospitals to improve care coordination and reduce readmission rates. While the current policy corrects for the perverse incentives that previously discouraged hospitals from acting to reduce readmissions, several issues remain with how the current penalty is computed: the effect of random variation on hospitals with small numbers of cases, the inability of the industry to reduce average penalties with improved performance, the correlation of patient income and readmission rates, and the inverse relationship between readmissions and mortality for cardiac patients. To address these issues, we developed several refinement options guided by four principles—namely, that an improved policy should:

- maintain or increase an average hospital's incentive to reduce readmissions.
- increase the share of hospitals that have an incentive to reduce readmissions.
- make penalties a constant multiple of the costs of readmissions.
- not increase expected Medicare expenditures above current law.

TABLE 4–4 **Hospital readmission policy issues and potential solutions**

Concern	Description of the problem	Proposed solution
Random variation and small number of observations	It is difficult to distinguish between random variation and true performance when examining a small number of cases for a small number of conditions.	• Use all-condition readmissions. • Use 3 years of data. • Allow hospitals to aggregate performance within a system.
Computation of the penalty multiplier	• Penalty remains constant as industry readmission rates improve. • Penalty is a different multiplier of excess readmission cost for each condition.	Drop the multiplier and set the penalty equal to the cost of excess readmissions, use all-condition readmissions, and lower the readmission targets below the national average to maintain budget neutrality with the current policy if readmission rates do not decline.
Heart failure readmissions negatively correlated with heart failure mortality	Some hospitals may be more likely to receive a penalty if they have low mortality or if they have high admission rates of low-severity patients.	Use an all-condition measure, which has less of a negative correlation.
Correlation between SES and readmission rates	Lower income patients have higher readmission rates.	• Report all hospital risk-adjusted rates without an SES adjustment. • Compute targets for the purposes of the penalty for peer groups of hospitals with similar low-income shares (SSI beneficiaries).

Note: SES (socioeconomic status), SSI (Supplemental Security Income).

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Table 4-4 summarizes the problems with the current policy and presents proposed solutions. We then address each of these issues and the proposed solution in detail. In essence, our combination of solutions shifts the current policy's measurement of readmission rates for specified conditions to one that measures readmission rates for all conditions against a predetermined readmission target. These changes address most of the shortcomings in the current policy, including the issues of random variation due to small sample size, computation of the penalty, and the negative correlation between mortality and readmissions. Another refinement—computing separate target rates for peer groups of hospitals—is designed to address the positive correlation between shares of low-income patients and readmission rates. These changes would require changes in law because the current readmissions penalty formula is set in law.

Issue 1: Random variation and small numbers of observations

One concern with any incentive program that penalizes hospitals with poor outcomes is that hospitals with a small number of cases may receive a penalty because of random variation—that is, variation in outcomes not associated with quality of care or factors in the risk-adjustment models. To address this issue, the Yale method used by CMS does not compare actual outcomes with expected outcomes. It compares "adjusted actual" readmissions with expected readmissions. Adjusted actual outcomes are computed using a random effects hierarchical model. From a practical standpoint, this is equivalent to blending the hospital's own actual readmission rate with the average rate in the country. Large hospitals are judged mostly on their own performance, but small hospitals' adjusted actual weights are based primarily on the national mean readmission rate.

A concern raised with this approach is that it shrinks all readmission rates toward the mean. This reduces the odds of correctly or incorrectly identifying a small provider as having high readmission rates, thereby muting the effect of a hospital's relatively poor (or good) performance. Such blending reduces hospitals' incentives to reduce readmissions, as their scores only partially depend on their performance and thus they receive only partial credit for any improvement. A more complete discussion of how CMS moves reported readmission rates toward the mean is

available from CMS with evaluations of the method in the literature (Ash et al. 2011, Department of Health and Human Services 2010, Mukamel et al. 2010, Silber et al. 2010).

Alternative solution to the small numbers problem

A more practical solution to the problem of small numbers of observations is to increase the number of observations being evaluated. This solution would reduce random variation and increase the incentive to reduce readmissions. Currently, CMS evaluates readmission rates of each condition individually. A median hospital has only about 70 patients for AMI and 250 observations for heart failure (Table 4-5). The result is a great deal of random variation in these condition-specific readmission rates, which is why CMS then shrinks any variation from the national mean toward the national mean. However, this technique can hide true differences and reduces incentives.

An alternative is to use an all-condition measure of readmissions using three years of data (last column of Table 4-5).[6] Under this measure, the median hospital would have about 5,000 observations and more than 90 percent of hospitals would have a sample of over 1,100 discharges with which to judge their readmission rates (Table 4-5). Given this sample size, there would be 95 percent confidence that the true readmission rate would not be less than 1.7 percentage points below the reported readmission rate. This alternative would eliminate the need to shrink values toward the national mean.[7]

If some hospitals (e.g., small hospitals) were still concerned about random variation, the policy could allow hospitals to report results jointly with other hospitals if they wanted to avoid the risks of random variation. For public reporting, each hospital would still have its own performance reported if it had more than 100 observations. However, when computing penalties, CMS would aggregate data from a group of hospitals and jointly evaluate that rate of excess readmissions.[8] This procedure would make hospitals' financial performance dependent on the readmissions of other hospitals in a voluntary group and create incentives for hospitals to share best practices and jointly work with post-acute care providers to improve transitions.

Issue 2: Computation of readmission penalty

The HRRP produces a penalty that is more than four times the cost of the reported excess readmissions in the three conditions covered under the policy. Some industry observers have suggested that this penalty multiplier was simply a drafting error in the legislation, with the implication that it should be removed from the formula (Premier Healthcare 2012). However, others see the penalty multiplier as increasing the incentive to reduce readmissions. To create a financial incentive for a hospital to act, the penalty needs to be greater than a hospital's marginal profit from the excess readmissions for the three conditions. This is especially true given that, under the current method of computing excess readmissions, the level of excess admissions for any individual hospital is "shrunk" toward zero, depending on the number of observations. Therefore, given the current computation of the cost of excess readmissions, a penalty multiplier may be needed to induce hospitals to reduce readmissions and lose the revenue associated with those readmissions. The current penalty produces four to five times the revenue received from excess readmissions for the three conditions.

Even if the average magnitude of the penalty is reasonable to generate a material incentive to change behavior and offset the effect of shrinking excess readmissions, the way the penalty is structured in law creates four problems in the long run:

- Under the current formula (penalty = cost of excess readmissions × (1/national readmission rate)), if the national readmission rate goes down, an average hospital's readmission penalty will remain roughly constant. The decrease in the cost of excess readmissions in the formula is offset by the increase in the multiplier in the formula. (For an example, see online Appendix 4-B to this chapter, available at http://www.medpac.gov.)
- For lower readmission rate conditions brought into the readmission policy in the future, there will not be equity across hospitals because hospitals that provide the types of care that have lower readmission rates will have larger penalties. For example, all else equal, the penalty for one excess readmission for a condition with a 5 percent national readmission rate will be five times the penalty for one excess readmission for a condition with a 25 percent national readmission rate.
- Hospitals do not have a known readmission target, because the future average risk-adjusted readmission rate (not the past rate) acts as the benchmark.
- Because a hospital's penalty will increase if other hospitals lower their readmission rates more than it does, there is not an incentive for hospitals to cooperate with each other to reduce rates.

EMBARGOED FOR RELEASE UNTIL 4:00PM JUNE 14, 2013

TABLE 4–5

Using an all-condition measure over three years reduces random variation and addresses the small number of observations problem

	Number of cases (measured over 3 years)			
	Current 3-condition policy			Proposed all-condition measure
Percentile	AMI	Heart failure	Pneumonia	
10th	10	60	60	1,170
Median	70	250	230	5,170
90th	410	810	580	16,480

Note: AMI (acute myocardial infarction).

Source: MedPAC analysis of Medicare claims data 2008 to 2010.

These four problems with the penalty are not critical in the short term because the current policy includes only three conditions with relatively high readmission rates and the penalty is capped in 2013 and 2014 at 1 percent and 2 percent, respectively, of base operating payments. However, when conditions with low readmission rates are included in the policy and if the industry significantly lowers the national average readmission rates, a change to the formula may be appropriate to avoid unduly penalizing hospitals if industry readmission performance improves.

Replacing penalty multiplier with a prospective target

The current readmission penalty could be revised to eliminate the multiplier and also set a fixed readmission target. This change would allow readmission penalties to decline as industry performance improves. However, eliminating only the penalty multiplier while continuing to limit the policy to three conditions would diminish the financial incentive to reduce readmissions and would increase Medicare spending. To expand the incentive to a broader spectrum of readmissions and avoid increases in Medicare spending, there could be two additional changes. First, CMS could move to an all-condition readmission measure. This change would increase the number of conditions subject to the incentive and encourage system-wide changes to improve care coordination (Naylor et al. 2012). Second, the target level of admissions could be based on past national averages. For example, the target could be the readmission rate for hospitals at the 40th percentile from a specific year, such as 2011. Such a target rate could be set to accomplish two goals: First, under the set target, hospitals would know they could avoid penalties if they reached the target. Second, Medicare program savings would be guaranteed through reduced readmissions or through higher penalties. For example, if all hospitals reduced readmissions below the target (such as the 40th percentile of the 2011 readmission rates), no hospital would receive a penalty. Instead, savings would be generated from fewer rehospitalizations. In contrast, if hospitals' readmissions did not meet the target, savings would come from the penalty imposed. From this point forward in this chapter, we use a target equal to the 40th percentile of historic readmission rates for illustration, but the Commission is not endorsing any particular target.

Table 4-6 (p. 104) contrasts penalties under the current policy (columns 3 and 5) with a revised policy using an all-condition measure and a prospective target (columns 4 and 6). Under current policy, readmission penalties stay roughly the same even after readmission rates are reduced. For example, the average penalty for a hospital in the 6th decile of potentially preventable readmissions (12.9 percent readmission rate) is currently 0.34 percent. Even after a 10 percent reduction in readmissions, the penalty would still be roughly the same (0.34 percent). This is because under current policy, benchmarks move as industry performance improves. Therefore, roughly half of all hospitals will be penalized for each condition covered by the policy. One concern is that some hospitals with high readmission rates may not see a way to reduce rates faster than everyone else and would choose to simply accept the penalty rather than invest in efforts to reduce readmissions.

Alternatively, CMS could use an all-condition measure with a prospective target. Table 4-6 (column 4) shows what would happen if the target were set at the 40th percentile of historic rates. If there were no reduction in readmission rates, 40 percent of hospitals would not face

EMBARGOED FOR RELEASE UNTIL 11:00AM JUNE 14, 2013

TABLE 4–6

Under revised hospital readmission policy, penalties would decline as industry performance improved

All-condition readmission decile	Average risk-adjusted potentially preventable readmission rate	Simulation of no improvement in readmission rates		Simulation of 10 percent reduction in readmission rates by all hospitals		
		Current policy penalty	All-condition prospective target penalty	Current policy penalty	All-condition prospective target penalty	Readmission reduction savings
1	9.6%	0.02%	0.00%	0.02%	0.00%	0.79%
2	10.9	0.06	0.00	0.05	0.00	0.93
3	11.6	0.12	0.00	0.12	0.00	1.02
4	12.0	0.17	0.00	0.17	0.00	1.06
5	12.5	0.23	0.23	0.23	0.00	1.09
6	12.9	0.34	0.71	0.34	0.00	1.15
7	13.4	0.37	1.00	0.37	0.01	1.17
8	14.0	0.46	1.00	0.45	0.37	1.25
9	14.9	0.60	1.00	0.59	0.95	1.36
10	17.1	0.73	1.00	0.72	1.00	1.76
Average	12.9	0.31	0.48	0.30	0.21	1.14

Note: Penalties calculated as share of base operating payments. For illustration, the all-condition prospective target was set at the historic 40th percentile.

Source: MedPAC computations using the 3M potentially preventable readmission algorithm and the 2010 MedPAR data for 3,006 inpatient prospective payment system hospitals with over 1,000 discharges from 2008 through 2010.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

a penalty and 60 percent would (column 4). In contrast, if hospitals reduced their readmission rates by 10 percent (column 6), all hospitals in the first six deciles would avoid readmission penalties.[9] The average penalty would fall to 0.2 percent of operating payments, well below the 0.3 percent penalty under current law. While penalties are reduced, the Medicare program would realize savings equal to 1.14 percent of operating payments from the 10 percent reduction in readmissions. On net, the reduction in readmissions would result in a better outcome for patients, lower penalties for hospitals, and reduced spending for the program. If there were no reduction in readmissions, the all-condition penalty (without a multiplier) would produce a higher penalty than the three-condition penalty under current law (0.48 percent on average), but this penalty could still be less than what the penalty in current law will be after it is expanded to more conditions in 2015.

Our simulation methods use the 3M all-condition readmission measure. This measure is widely used by hospitals and states. We used it because it was available at the time the data analysis for this chapter began. It would also be possible to use the new all-condition unplanned-readmission measure developed by Yale, which has been endorsed by NQF.[10] We want to stress that use of the all-condition measure to address current issues associated with the current readmission penalty does not depend on which of these two all-condition measures is used. In addition, over time we expect both models to continue to be refined to improve risk adjustment for clinical factors. These measures are compared in online Appendix 4-A to this chapter (http://www.medpac.gov).

In addition to the certainty that comes with a target level of readmission, hospitals would have an increased incentive to work together to reduce readmissions. Penalties would no longer increase when a competitor's readmission rates declined. This approach of moving toward a fixed target is similar to the system introduced by the New York State Medicaid system, which set the target with an expectation of a 24 percent decline in readmissions for each hospital over three years. If New York hospitals meet that target, they avoid readmission penalties on their Medicaid patients.

Issue 3: Relationship between mortality and readmissions

An additional concern regarding readmissions is that for heart failure patients, readmission rates are negatively

TABLE 4–7

Illustration of how low mortality might cause higher readmission rate

	Type of hospital	
	"Saves" patients at greatest risk	**Does not "save" patients at greatest risk**
Patients seen	100	100
Admissions	10	10
Mortality	1 *(1/10 = 10%)*	2 *(2/10 = 20%)*
Readmissions	2 *(2/9 = 22%)*	1 *(1/8 = 12.5%)*

Note: The converse is also true: If hospitals have high mortality rates and their patients who survive have above average resiliency in ways that are not fully picked up by risk adjusters, then readmission rates could be low for those hospitals.

correlated with mortality rates. There are two competing explanations for why it is so. The explanation that has been suggested by some hospital executives is that hospitals with low mortality rates may save some very ill heart failure patients, but these patients are more likely to be readmitted because of factors that are not fully accounted for in the risk-adjusted model (Gorodeski et al. 2010). Table 4-7 illustrates how lower mortality rates might be associated with higher readmission rates. The first hospital has a greater tendency to save patients at the greatest risk. It has 10 admissions and 1 patient dies. Two other patients are discharged and later readmitted. The second hospital admits 10 patients at equal risk as the first hospital's patients. The two at greatest risk die and one is readmitted. As a result, the first hospital has a lower mortality rate and a higher readmission rate than the second hospital. Looking at these two hospitals, one would conclude that mortality and readmissions were negatively correlated.

An alternative hypothesis is that some hospitals are more likely to admit patients than others. Table 4-8 illustrates how admitting a greater number of low-severity patients (specifically, low severity that is not completely picked up by the risk adjuster) than other hospitals could also result in lower mortality and higher readmissions. For example, the first hospital admits a higher percentage of patients seen in its emergency room than the second hospital (12 percent vs. 10 percent). It could admit a heart failure patient who has relatively low severity and does not need inpatient care. This patient may have a low expected mortality rate, lower than can be fully accounted for by risk adjustment. Let us further suppose that the other patients were at equal risk and in both hospitals two patients died; the mortality rate at the first hospital would be lower (17 percent) than the mortality rate at the second hospital (20 percent). Therefore, the liberal admission policy could lead to lower risk-adjusted mortality. At the same time, if four patients return to the emergency room at each hospital and the first hospital admits three while the second hospital admits only two, the liberal admission policy could also lead to a higher readmission rate at the first hospital compared with the second one.

Based on an analysis of data averaged over 3 years for 1,663 hospitals with more than 1,000 Medicare cases, we confirmed the negative correlation between certain mortality and readmission rates. As shown in Table 4-9, p. 106, under the CMS–Yale method (data in the unshaded cells), the magnitude of the correlation is relatively large for heart failure mortality and the three readmission measures, small for pneumonia, and insignificant for AMI. For example, there is a correlation of –0.19 between CMS heart failure mortality and CMS heart failure readmissions. The Yale team that developed the CMS readmission and mortality measures reported similar correlations; they describe the magnitude of the correlation between heart failure mortality and heart failure readmissions as "quite modest" (Krumholz et al. 2013).[11] Others may view the magnitude of the heart failure mortality measure with the four readmission measures as material.

TABLE 4–8

Illustration of how admitting lower severity patients could decrease mortality rate and increase readmission rate

	Type of hospital	
	High admitting	**Low admitting**
Patients seen	100	100
Admissions	12	10
Mortality	2 *(2/12 = 17%)*	2 *(2/10 = 20%)*
Readmissions	3 *(3/10 = 30%)*	2 *(2/8 = 25%)*

Note: This hypothesis also rests on the assumption that risk adjustment is imperfect and admitting relatively healthy patients will not be fully accounted for by the risk adjuster.

EMBARGOED FOR RELEASE UNTIL 6:00PM JUNE 14, 2013

TABLE 4–9 High negative correlation between heart failure mortality and readmissions

	CMS AMI readmissions	CMS pneumonia readmissions	CMS heart failure readmissions	3M all-condition readmissions
CMS AMI mortality	0.00	–0.02	–0.02	–0.01
CMS pneumonia mortality	–0.09*	–0.01	–0.07*	–0.06
CMS heart failure mortality	–0.23*	–0.19*	–0.19*	–0.25*
AHRQ 5-condition 30-day mortality	–0.13*	–0.12*	–0.08*	–0.02

Note: AMI (acute myocardial infarction), AHRQ (Agency for Healthcare Research and Quality). We averaged data from 2008 to 2010 for 1,663 hospitals with at least 1,000 Medicare cases in each year. We examined correlations only using hospitals with a fairly large number of cases to eliminate random variation. The AHRQ 30-day mortality measures include heart failure, pneumonia, AMI, stroke, and hip fracture. Unshaded cells indicate they were measured by the CMS–Yale method.
* Significant at the $p < 0.01$ level.

Source: MedPAC analysis of hospital compare and 2008 to 2010 claims data from CMS.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

We also looked at the correlations with an Agency for Healthcare Research and Quality (AHRQ) five-condition mortality measure and a 3M all-condition readmission measure. The AHRQ measure is negatively correlated with the three CMS readmission measures, and the magnitude of the negative correlation between the AHRQ method and the various readmission rates is a blend of the first three rows—as one might expect—because it includes those mortality rates plus two others. An interesting finding in our data is that heart failure mortality is correlated with greater readmissions across all categories of readmissions, not just heart failure readmissions. We did not see the magnitude of correlations or the breadth of correlations across conditions for AMI and pneumonia mortality. One possibility is that heart failure admissions are more subject to variations in clinical judgment. It is even more highly negatively correlated (–0.25) with the 3M all-condition readmission measure. It could be that heart failure mortality is a marker for a liberal admissions policy. We plan to conduct more analyses of this and other relationships between mortality and readmissions over the next year.

If the readmission policy moves toward an all-condition measure, the issue of negative correlation with mortality may become attenuated. For example, the 3M all-condition readmission measure is slightly correlated with the AHRQ five-condition 30-day mortality measure (–0.02) but it is not statistically significant. The correlation with an all-condition mortality measure and correlations with respect to the Yale all-condition metric remain to be computed.

In the short term, the issue of negative correlation between mortality and readmission should not delay moving forward with an all-condition readmission measure, given the low correlation with the more inclusive mortality measure. Over the longer term, we are working on developing a joint mortality–readmission measure and may investigate adjusting readmission measures for a hospital's tendency to admit.

Issue 4: Correlation between socioeconomic status and readmission rates

There is a concern that hospitals serving large shares of poor patients tend to have higher readmission rates and that hospitals serving these patients will be more likely to pay readmission penalties (Joynt and Jha 2013a, Joynt and Jha 2013b, Lindenauer et al. 2013). This concern is similar to the concern that poor patients have higher costs of care; the higher cost of serving poor patients is addressed with inpatient DSH payments. In contrast, there is no income adjustment with respect to computing readmission rates or readmission penalties.

Currently, CMS uses a risk-adjustment model developed by a team from Yale that does not adjust for the effect of socioeconomic status (SES) on readmissions. CMS

TABLE 4–10

Readmission penalties are higher for hospitals with more low-income patients, 2008–2010

SSI decile	Share of Medicare patients on SSI	Average readmission penalty in 2013	Share of hospitals at 1 percent penalty cap	Share of hospitals with no penalty
1	0–3%	0.21%	5%	41%
2	3–4	0.23	5	37
3	4–5	0.22	6	43
4	5–6	0.26	7	39
5	6–7	0.29	7	32
6	7–9	0.30	8	27
7	9–10	0.36	10	21
8	10–13	0.40	14	18
9	13–18	0.39	17	21
10	18–74	0.45	20	14
Average	9	0.31	10	29

Note: SSI (Supplemental Security Income). Penalty is calculated as a percentage of base operating payments and thus does not include outlier payments, indirect medical education payments, disproportionate share hospital payments, and special rural hospital specific payments. Penalties are computed as a share of base operating payments.

Source: MedPAC analysis of 2010 Medicare claims files for 3,006 inpatient prospective payment system hospitals with 1,000 discharges in each year between 2008 and 2010 and SSI files from CMS.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

and NQF have argued against including race and income as risk adjusters because that would be equivalent to accepting poorer performance by hospitals that serve poorer patients:

> The measure does not adjust for SES or other patient factors such as psycho-social support because we do not want to hold hospitals to different standards of patient care simply because they treat a large number of low SES patients. Moreover, we do not want to mask potential disparities in care or minimize incentives to improve the outcomes of care for disadvantaged populations. This is also consistent with the NQF's position regarding risk adjustment, which is that risk-adjusted measures should not include variables such as SES and race that would adjust away disparities in care. (Centers for Medicare & Medicaid Services 2012)

To test for the effect of SES on readmissions, we evaluated the effect of different factors on readmission rates, including race, patient income, and hospitals' DSH percentage, as used in other research. We found that using hospitals' share of low-income patients was a stronger and more consistent predictor of readmissions than race or the DSH percentage. To adjust for income, we divided hospitals into deciles based on shares of Medicare patients who qualified for Supplemental Security Income (SSI), which is a program for seniors and the disabled with incomes of roughly $1,000 per month or less. This income statistic has the advantage of being based purely on the Medicare patients served at the hospital as opposed to other statistics such as the DSH percentage, which can be influenced by the offering of services such as obstetrics. We found that hospitals with high shares of poor patients (as indicated by their share of Medicare patients on SSI) tended to have higher readmission rates and thus higher penalties under the HRRP. Table 4-10 shows the strong and almost monotonic relationship between SSI and readmission penalties under the current readmission policy. We found similar results when using the 3M method of computing all-condition PPR rates and the Yale all-condition unplanned-readmission measure. Because we see the same effect with the 3M method (not shown) and the CMS–Yale method for computing readmissions, we conclude that the relationship between shares of low-income patients and readmissions is not due to the method for computing readmissions and penalties. Table 4-10 also shows that, while it may be more difficult to reduce

TABLE 4–11

Comparing hospitals with their peers makes penalties similar across hospitals serving patients with different income levels, 2010

SSI decile	Share of Medicare patients on SSI	Current penalty using 3 conditions	Current penalty after mandated expansion to 7 conditions	Simulation using peer group all-condition penalty with a target equal to 40th percentile
1	0–3%	0.21%		0.49%
2	3–4	0.23		0.47
3	4–5	0.22		0.47
4	5–6	0.26	Penalty	0.48
5	6–7	0.29	will increase	0.47
6	7–9	0.30	above	0.47
7	9–10	0.36	2013 levels	0.49
8	10–13	0.40		0.46
9	13–18	0.39		0.49
10	18–74	0.45		0.54
Average		0.31	Over 0.31	0.48

Note: SSI (Supplemental Security Income). The magnitude of the increase in the penalty over the penalty with three conditions will depend on the number of conditions added to the penalty; under current law the number of conditions will at least double. The exact levels of penalties will not be known until CMS adopts risk adjusters for these conditions. All-condition readmission measure is based on 3M potentially preventable readmissions. Penalty is calculated as a percentage of base operating payments and thus does not include outlier payments, indirect medical education payments, disproportionate share hospital payments, and special rural hospital specific payments.

Source: MedPAC analysis of 2010 Medicare claims files and SSI files from CMS.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

readmission rates for poorer patients, it is possible to bring rates toward the national average. That is, even among hospitals with the highest share of SSI patients (decile 10), 14 percent do not face penalties in 2013. This amount is consistent with reports of hospitals serving poor patients being able to reduce their readmission rates (Jack et al. 2009, McCarthy 2012).

Potential solution: Evaluate hospitals in relation to their peers

One way to address the issue of readmissions reduction for hospitals with high shares of low-income patients is to compute penalties by comparing hospitals with a peer group serving a similar share of low-income patients. All hospitals would continue to report their all-condition risk-adjusted readmission rate—it would not be adjusted for SES and thus disparities would not be masked. However, when computing penalties, each hospital's target readmission rate would be based on the performance of hospitals with a similar patient profile. For example, the national 40th percentile risk-adjusted readmission rate is 12.1 percent using the 3M computation method. That would be the target for hospitals with an average share of patients on SSI. The target rate for hospitals with only 2 percent of their Medicare beneficiaries on SSI would be lower (11.3 percent) and the target for hospitals with 15 percent on SSI would be higher—the 40th percentile of that group (13.2 percent). Because CMS would report readmission rates without adjustment for income, we would be able to identify disparities, but CMS would reduce the penalties faced by hospitals serving large numbers of poor patients by giving them a higher target readmission rate. In practice, this would have the effect of using one method of risk adjustment for public reporting and a second method when assessing financial penalties (to correct for the problem of hospitals serving poor patients paying disproportionate penalties). Using peer groups to determine penalties and directing additional resources to providers serving poor communities (as discussed below) may help reduce disparities in penalties between hospitals serving poorer and wealthier communities.

Simulating computation of readmission penalties based on peer group comparisons In Table 4-11 we illustrate a way to correct for the problem of hospitals serving poor patients paying significantly higher penalties. Table 4-11

TABLE 4–12

Setting a fixed readmission target for SSI peer groups based on 40th percentile readmission rate for an all-condition readmission measure, 2010

SSI decile ranked by share of Medicare patients on SSI	Current penalty using three conditions, assuming no improvement in readmissions	Simulation of 10 percent reduction in readmission rates by all hospitals			Readmission rate target: 40th percentile of readmission distribution for peer group
		Current penalty	Peer group all-condition penalty	Readmission reduction savings	
0–3%	0.21%	0.21%	0.22%	1.01%	11.3%
3–4	0.23	0.22	0.20	1.04	11.6
4–5	0.22	0.22	0.17	1.05	11.7
5–6	0.26	0.26	0.19	1.10	12.0
6–7	0.29	0.28	0.19	1.09	12.0
7–9	0.30	0.30	0.20	1.12	12.3
9–10	0.36	0.35	0.19	1.16	12.5
10–13	0.40	0.39	0.15	1.19	13.2
13–18	0.39	0.39	0.27	1.29	13.2
18–74	0.45	0.44	0.34	1.48	13.6
Average	0.31	0.30	0.21	1.15	12.1

Note: SSI (Supplemental Security Income). All-condition readmission measure is based on 3M potentially preventable readmissions. Penalty is calculated as a percentage of base operating payments and thus does not include outlier payments, indirect medical education payment, disproportionate share payments, and special rural hospital specific payments.

Source: MedPAC analysis of 2010 Medicare claims files and SSI files from CMS.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

divides all hospitals into 10 peer groups based on the share of their patients on SSI. The 10 categories range from less than 3 percent SSI patients to more than 18 percent SSI patients. The third column shows that, under the current policy, the average penalty for hospitals with the most SSI patients is double the penalty for hospitals with the fewest SSI patients (0.45 percent and 0.21 percent, respectively). The fourth column is presented to remind readers that penalties under current law will increase in 2015 when the current policy expands from penalizing hospitals for excess readmissions for three conditions to implementing penalties for seven conditions. While we know penalties will increase in 2015 under current policy, the magnitude of the increase is unknown. The fifth column of Table 4-11 presents the penalties under our alternative all-condition measure. The average all-condition measure penalty (0.48 percent) is higher than the average penalty under the current three-condition measure (0.31 percent), but it may be lower than future penalties as the number of conditions covered by the current readmission measure increases to seven conditions in 2015. An all-condition measure could have a lower penalty than a seven-condition measure in part due to removal of the multiplier that exists in the current formula.

An important point in Table 4-11 is that the magnitude of the penalty is similar across income categories under the peer group alternative. Hospitals serving a greater share of poor patients no longer have average penalties that are double the penalties of those serving the fewest poor. All penalties range from 0.46 percent to 0.54 percent.

Table 4-11 shows the baseline case where there is no improvement in readmission rates. However, the literature has shown that hospitals do have the potential to reduce readmission rates (Jack et al. 2009, McCarthy 2012, Rennke et al. 2013, Robert Wood Johnson Foundation 2013a, Robert Wood Johnson Foundation 2013b). Therefore, we also conducted a simulation of the penalties, assuming a 10 percent reduction in readmission rates (Table 4-12).

Table 4-12 shows that the all-condition penalty with a fixed target can accomplish two goals. First, penalties decline when readmissions decline; second, average

penalties of hospitals serving poor patients are brought closer to the average penalty. For example, the average penalty for hospitals with the largest share of SSI patients would decline from 0.44 percent of payments to 0.34 percent of payments. In addition, the fifth column shows that if readmission rates went down 10 percent, there would be much greater savings from readmission reductions than from penalties. This reduction would result in fewer resources that the health care system needed to spend on unnecessary care. It also would represent an important improvement for patients by avoiding unnecessary admissions. The last column in Table 4-12 shows what the peer group targets would be for hospitals in different income categories.[12]

The system of using SSI categories to compute penalties eliminates most of the variation due to patient income. However, the decile with the highest share of poor patients still has somewhat higher average penalties (0.34 percent of operating payments) than the average penalty (0.21 percent of operating payments). This result suggests that within this decile, there is still a fairly wide distribution of readmission rates, including some hospitals with unusually high readmission rates. One solution to address these outliers could be to direct funds from AHRQ's patient safety organizations or the care transitions initiative (which is funded by CMS as part of the Partnership for Patients initiative) to help hospitals serving the largest share of poor patients (Medicare Payment Advisory Commission 2010, Naylor et al. 2012). Another option is to take funds from the Quality Improvement Organizations (QIOs) and redirect them to provide grants to hospitals that could be used for consultants and for convening providers in the community to work together to reduce readmissions (Medicare Payment Advisory Commission 2011, Medicare Payment Advisory Commission 2010, Naylor et al. 2012). These hospitals would have to report their readmission rates just as all other hospitals do, but they would be given some tools to improve their rates. First, their penalties would be somewhat reduced due to having a higher benchmark readmission rate (13.6 percent vs. an average of 12.1 percent). Second, they could compare themselves with a group of peer hospitals that serve a similar share of low-income patients. They would also be given temporary resources to help improve their performance to the level of their hospital peer group. Finally, the QIO funds could be used for safety net hospitals serving poor patients to learn best practices from other safety net hospitals in their peer group that have kept their readmission rates near the national average (Jack et al. 2009, McCarthy 2012).

The existing HRRP policy does not recognize differences among hospitals' proportion of poor Medicare patients when calculating the readmissions penalty. The improvements outlined above would make such an adjustment to the penalty using the hospitals' percentages of low-income Medicare patients. The Commission's research has shown that after adjusting for clinical risk, income is still an important SES variable in explaining variation in readmissions. Moreover, it is important to recall that in June 2011 the Commission recommended retargeting the QIO resources to providers that are poor performers—in this instance, hospitals with high proportions of low-income Medicare beneficiaries and high readmission rates might be good candidates for temporary help to improve their readmission rates. In these two ways, mitigating (but not eliminating) the impact of the penalty for hospitals serving many of the poor through the penalty formula and targeting resources for the worst performers, the Commission would expect to improve readmission rates for these populations.

However, because the complicated landscape of patient contextual and social factors affecting the risk of readmission is not well understood, gaining a better understanding of the association between patient-level characteristics and hospital readmissions is important so that hospitals can direct intervention resources toward the patients at highest risk. Discussions of risk adjustment for socioeconomic factors in the area of hospital readmissions have raised concerns that including these factors will mask disparities and lead to different standards of care for different patient populations. An area of research that should be pursued involves gaining a better understanding of how socioeconomic factors that affect patients' risk of problems with postdischarge care could instead help to identify areas for interventions to reduce existing disparities. Such research would give hospitals more tangible methods of managing patients in these circumstances. Part of that research should focus on health systems that have developed strategies that have lowered their population's readmission rates.

Conclusions and implications for future research

The current readmission penalty is one step forward in a series of steps to improve care coordination and outcomes of care for Medicare patients. However, our analysis of the current policy exposes shortcomings in the readmission

EMBARGOED FOR RELEASE UNTIL 4:00PM JUNE 14, 2013

rate and penalty formulas that can work at cross purposes to the policy's intent. Our proposed combination of refinements—an all-condition readmission measure, a preset readmission target for hospitals, and an adjustment of hospitals' targets based on their share of SSI patients—is intended to address the current policy's shortcomings. We also favor a longer term research agenda that includes investigating the relationship between readmissions and mortality and whether to expand the policy to include critical access hospitals, observation stays, and post-acute care providers. Over time researchers could also investigate improving risk adjusters by adding better measures of patient literacy, patient frailty, and other factors. We can also move to continue to ensure incentive alignment with future policies that may be adopted, such as bundling services or redesigning the Medicare benefit and beneficiary cost sharing. ■

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Endnotes

1 The incentives to coordinate care should affect more than just the hospital. For example, the Commission has recommended that skilled nursing facilities face a readmission penalty. The Commission has also discussed testing broader incentives through accountable care organizations or bundling.

2 We are starting to explore a "healthy days at home" measure that would take some set period—for example, 30 days after discharge—and count how many days the beneficiary was at home and alive as opposed to being in a hospital or skilled nursing facility. A combined measure of mortality and readmissions could be a first step in this direction and could be investigated as a future refinement of the current readmission policy.

3 It is important to note that not all potentially preventable admissions can be avoided (3M Health Information Systems 2008). The 3M method classifies a potentially preventable readmission as a readmission that is clinically related to the initial hospitalization in that the underlying reason for the readmission may be plausibly related to the care during and immediately after a prior hospital stay. A clinically related readmission may have resulted from a process of care or treatment during the prior admission or from a lack of postdischarge follow-up rather than from unrelated events that occurred after the prior admission.

4 The rate for each hospital is computed as the number of readmissions at any hospital divided by the number of discharges for that hospital. Thus, the denominator does not include patients who die in the hospital and counts a maximum of one readmission per initial index admission. Both measures also exclude from the denominator patients who were transferred to another acute care hospital.

5 Excess cost is based on base operating payments for the initial admission, not payments for the readmission. For most medical diagnoses, the payments for the initial admission and for readmissions are generally similar, but for surgical diagnoses, the payment for the initial admission often can be substantially greater than the payment for the readmission.

6 It would be possible for larger hospitals to use one year of data. But there is always a trade-off in which using only the most recent year of data results in a smaller sample of data and more random variation. It would also be possible to weight more recent data more than older data.

7 If a hierarchical random effects model were used, values would continue to shrink toward the national mean. However, the degree to which values would shrink toward the mean would diminish because of significant increases in the number of observations.

8 The group of hospitals could be hospitals in a system or hospitals located in the same community that jointly reduce readmissions.

9 We used a 10 percent reduction for illustration. Greater improvements would result in even lower penalties.

10 The all-condition readmission method developed by the Yale team continues to use a random effects hierarchical model that results in shrinking values toward the mean. However, the degree to which values shrink toward the mean is reduced because of aggregating admissions into five categories, resulting in larger pools of admissions. Larger numbers of admissions in each pool in turn reduce the degree to which values shrink toward the mean.

11 Almost all the correlations among CMS measures are slightly negative. This result could in part be an artifact of the way CMS computes the measures. For mortality under the CMS system, the death of a transferred patient is counted against the hospital that initially served the patient. Readmissions are the opposite; when a patient is transferred to a second acute care hospital and later readmitted, that admission and readmission are counted only when computing the second hospital's admission and readmission rates (under both the CMS and the 3M methods). So it is possible that hospitals that transfer out difficult patients will look worse on mortality and better on readmissions if the risk adjuster does not fully capture the extra difficulty with transfer cases. The reverse holds for large teaching hospitals that receive difficult transfers. This phenomenon could explain some of the small negative correlations but is unlikely to be large enough to explain the large heart failure inverse relationship.

12 The categories are now discrete with up to a 0.4 percent difference in the target readmission rate between adjacent categories. This difference could be addressed by smoothing rates within each decile similar to using a spline function. The adjuster would then be continuous without any jumps at the 10 cut points, but each hospital could still clearly be given a set of peers with similar SSI levels against which to benchmark themselves.

EMBARGOED FOR RELEASE UNTIL 11:00PM JUNE 14, 2013

References

3M Health Information Systems. 2008. *Potentially preventable readmissions classification system.* Murray, UT: 3M.

Ash, A. S., S. E. Fienberg, T. A. Louis, et al. 2011. *Statistical issues in assessing hospital performance.* Report commissioned by the Committee of Presidents of Statistical Societies. Baltimore, MD: COPSS–CMS.

Bellone, J. M., J. C. Barner, and D. A. Lopez. 2012. Postdischarge interventions by pharmacists and impact on hospital readmission rates. *Journal of the American Pharmacists Association* 52, no. 3 (May–June): 358–362.

Blum, J. 2013. Delivery system reform: Progress report from CMS. Statement of Jonathan Blum, Acting Principal Deputy Administrator and Director, Center for Medicare, Centers for Medicare & Medicaid Services before the Senate Finance Committee. February 28.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2012. Medicare program; hospital inpatient prospective payment systems for acute care hospitals and the long-term care hospital prospective payment system and fiscal year 2013 rates; hospitals' resident caps for graduate medical education payment purposes; quality reporting requirements for specific providers and for ambulatory surgical centers. Proposed rule. *Federal Register* 77, no. 92 (May 11): 27870–28192.

Chugh, A., M. V. Williams, J. Grigsby, et al. 2009. Better transitions: Improving comprehension of discharge instructions. *Frontiers of Health Services Management* 25, no. 3 (Spring): 11–32.

Department of Health and Human Services. 2010. Hospital Compare database. http://www.hospitalcompare.hhs.gov/.

Gorodeski, E. Z., R. C. Starling, and E. H. Blackstone. 2010. Are all readmissions bad readmissions? *New England Journal of Medicine* 363, no. 3 (July 15): 297–298.

Jack, B. W., V. K. Chetty, D. Anthony, et al. 2009. A reengineered hospital discharge program to decrease rehospitalization: A randomized trial. *Annals of Internal Medicine* 150, no. 3 (February 3): 178–187.

Jencks, S. F., M. V. Williams, and E. A. Coleman. 2009. Rehospitalizations among patients in the Medicare fee-for-service program. *New England Journal of Medicine* 360, no. 14 (April 2): 1418–1428.

Joynt, K. E., and A. K. Jha. 2013a. A path forward on Medicare readmissions. *New England Journal of Medicine* (March 6): Epub ahead of print.

Joynt, K. E., and A. K. Jha. 2013b. Characteristics of hospitals receiving penalties under the Hospital Readmissions Reduction Program. *Journal of the American Medical Association* 309, no. 4 (January 23): 342–343.

Kanaan, S. 2009. *Homeward bound: Nine patient-centered programs cut readmissions.* Oakland, CA: California HealthCare Foundation.

Kociol, R. D., R. D. Lopes, R. Clare, et al. 2012. International variation in and factors associated with hospital readmission after myocardial infarction. *Journal of the American Medical Association* 307, no. 1 (January 4): 66–74.

Krumholz, H. M., Z. Lin, P. S. Keenan, et al. 2013. Relationship between hospital readmission and mortality rates for patients hospitalized with acute myocardial infarction, heart failure, or pneumonia. *Journal of the American Medical Association* 309, no. 6 (February 13): 587–593.

Lindenauer, P. K., T. Lagu, M. B. Rothberg, et al. 2013. Income inequality and 30 day outcomes after acute myocardial infarction, heart failure, and pneumonia: Retrospective cohort study. *British Medical Journal* 346: f521.

McCarthy, D. 2012. *University of California, San Francisco Medical Center: Reducing readmissions through heart failure care management.* Case study: Innovations in care transitions. New York, NY: The Commonwealth Fund.

Medicare Payment Advisory Commission. 2011. *Report to the Congress: Medicare and the health care delivery system.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2010. *Report to the Congress: Aligning incentives in Medicare.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2008. *Report to the Congress: Reforming the delivery system.* Washington, DC: MedPAC.

Mukamel, D. B., L. G. Glance, A. W. Dick, et al. 2010. Measuring quality for public reporting of health provider quality: Making it meaningful to patients. *American Journal of Public Health* 100, no. 2 (February): 264–269.

EMBARGOED FOR RELEASE UNTIL 4:00PM JUNE 14, 2013

Naylor, M. D., L. H. Aiken, E. T. Kurtzman, et al. 2011. The care span: The importance of transitional care in achieving health reform. *Health Affairs* 30, no. 4 (April): 746–754.

Naylor, M. D., E. T. Kurtzman, D. C. Grabowski, et al. 2012. Unintended consequences of steps to cut readmissions and reform payment may threaten care of vulnerable older adults. *Health Affairs* 31, no. 7 (July): 1623–1632.

Parry, C., and E. Coleman. 2010. Active roles for older adults in navigating care transitions: Lessons learned from the care transitions intervention. *Open Longevity Science* 4: 43–50.

Premier Healthcare. 2012. Comment letter to Marilyn Tavenner about CMS–1588–P, Medicare Program; Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals and the Long-Term Care Hospital Prospective Payment System and Fiscal Year 2013 Rates; Hospitals' Resident Caps for Graduate Medical Education Payment Purposes; Quality Reporting Requirements for Specific Providers and for Ambulatory Surgical Centers. June 22.

Rau, J. 2012. Hospitals' readmissions rates not budging. *Kaiser Health News*, July 19.

Rennke, S., O. K. Nguyen, M. H. Shoeb, et al. 2013. Hospital-initiated transitional care interventions as a patient safety strategy: A systematic review. *Annals of Internal Medicine* 158, no. 5, part 2 (March 5): 433–440.

Robert Wood Johnson Foundation. 2013a. Coordinated home care reduces readmissions. http://www.rwjf.org/en/about-rwjf/newsroom/newsroom-content/2013/02/coordinated-home-care-reduces-readmissions-.html.

Robert Wood Johnson Foundation. 2013b. Heart failure education reduces readmissions. http://www.rwjf.org/en/about-rwjf/newsroom/newsroom-content/2013/02/heart-failure-education-reduces-readmissions.html.

Rockwood, K. 2012. Hospitalization and effects on cognition. *Neurology* 78, no. 13 (March 27): e86–87.

Silber, J. H., P. R. Rosenbaum, T. J. Brachet, et al. 2010. The Hospital Compare mortality model and the volume-outcome relationship. *Health Services Research* 45, no. 5, part 1 (October): 1148–1167.

Silow-Carroll, S., J. Edwards, and A. Lashbrook. 2011. *Reducing hospital readmissions: Lessons from top-performing hospitals.* Commonwealth Fund Synthesis Report. New York, NY: Commonwealth Fund.

Wilson, R. S., L. E. Hebert, P. A. Scherr, et al. 2012. Cognitive decline after hospitalization in a community population of older persons. *Neurology* 78, no. 13 (March 27): 950–956.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

CHAPTER 5

Medicare hospice policy issues

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

CHAPTER 5

Medicare hospice policy issues

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Chapter summary

The Commission made recommendations in March 2009 to improve the hospice payment system, increase accountability in the benefit, and improve data collection. Since then, several steps have been taken to increase accountability and data collection via the Patient Protection and Affordable Care Act of 2010 (PPACA) and CMS administrative actions, while additional steps are pending. In addition, through PPACA, the Congress gave CMS the authority to revise the hospice payment system as the Secretary determines appropriate no earlier than fiscal year 2014.

The Commission has conducted additional analyses to support the hospice payment reforms and enhanced accountability measures we have recommended. We also have examined other areas of concern, including considering whether a different payment rate is warranted for hospice provided to patients living in nursing facilities and the policy implications of unusually high rates of live discharge among some hospice providers.

***Payment reform*—**In March 2009, the Commission recommended that the hospice payment system be reformed to better align payments with the cost of providing care throughout a hospice episode. Currently, Medicare makes a flat payment per day, even though patients receive more hospice visits at the beginning and end of an episode, with fewer visits in the middle of an episode. Consequently, long stays in hospice are more profitable than short

In this chapter

- Background
- Improving Medicare's payments for hospice services
- Improving hospice accountability
- Hospice provided in nursing facilities
- Future research

stays. To address the mismatch between payments and hospice service intensity, the Commission recommended that Medicare move away from the flat per diem payment to one that is higher at the episode's beginning and end and lower in the intervening period. Using currently available data, the Commission has estimated how the labor cost of hospice visits change over the course of a hospice episode. These data demonstrate the U-shaped pattern of labor costs throughout hospice episodes and offer policymakers the evidence needed to begin reforming the payment system. We present an illustrative example of a revised payment system that can be implemented now using existing data. Given the magnitude of hospice spending devoted to long-stay patients, who are more profitable under the current payment system than other patients, it is important that an initial step toward payment reform be taken as soon as possible.

Accountability—Even with payment reform, there will still be a need to ensure that hospice providers comply with the benefit's eligibility criteria.

- ***Medical review***—Consistent with a Commission recommendation, PPACA required medical review of hospice stays exceeding 180 days for hospices with an unusually large share of long-stay patients. To date, CMS has not implemented that provision. The Commission's analysis of Medicare spending data for hospice stays exceeding 180 days shows that these expenditures are sizable and underscore the need for medical review of very long stays.

- ***Hospice live discharges—***Eighteen percent of hospice patients in 2010 were discharged alive from hospice. Among some hospices, rates were much higher. Little is known about what happens to patients after they are discharged alive from hospice. The Commission's analysis of rates of live discharge and outcomes by beneficiary and provider characteristics supports the need to ensure that beneficiaries are appropriate candidates for hospice at initial admission and throughout long episodes.

Payment for hospice care in nursing facilities—The Commission previously raised the issue of whether a different payment structure is needed for hospice care in nursing facilities. Our prior work has shown that hospices with more patients in nursing homes compared with other hospices have higher than average Medicare margins. In this chapter, we find that the majority of hospice care in nursing facilities occurs when the hospice provider has multiple patients clustered within individual nursing facilities, suggesting possible efficiencies (e.g., reduced travel time and mileage costs) from treating hospice patients in a centralized location. We also find that hospices provide fewer nurse visits but more aide visits to patients residing in nursing facilities compared with patients at home. Providing more

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

hospice aide visits to patients living in nursing facilities is counterintuitive and raises questions of duplicate payment. The nursing home room and board fees—paid largely from Medicaid funds or by patients and families—explicitly cover aide services provided by nursing facility staff to assist residents with their personal care needs (e.g., activities of daily living). We explore the potential for a reduction to the hospice payment rate for patients residing in nursing facilities in light of the overlap in responsibilities between the hospice and the nursing facility. ■

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

Medicare's hospice benefit

Medicare's hospice benefit covers palliative and support services for terminally ill beneficiaries who have a life expectancy of six months or less if the terminal illness follows its normal course. A broad set of services is included, such as nursing care; physician services; counseling and social worker services; aide and homemaker services; short-term hospice inpatient care (including respite care); drugs and supplies; physical, occupational, and speech therapy; and bereavement services for the patient's family.

Beneficiaries must "elect" hospice care for defined benefit periods; in doing so, they agree to forgo Medicare coverage for conventional treatment of the terminal illness. Under current policy, the first hospice benefit period is 90 days. For a beneficiary to initially elect hospice, two physicians—a hospice physician and the beneficiary's attending physician—are generally required to certify that the beneficiary has a life expectancy of six months or less if the illness runs its normal course. If the patient's terminal illness continues to engender the likelihood of death within six months, the patient can be recertified for another 90 days. After the second 90-day period, the patient can be recertified for an unlimited number of 60-day periods, as long as he or she remains eligible. For recertification, only the hospice physician has to certify that the beneficiary's life expectancy is six months or less. Beneficiaries can transfer from one hospice to another once during a hospice benefit period and can disenroll from hospice at any time.

Under the Medicare hospice benefit, there are four types of care: routine home care, continuous home care, general inpatient care, and inpatient respite care. Routine home care, which can be provided in a variety of settings—including the patient's home, a nursing facility, an assisted living facility, and other types of facilities—makes up more than 97 percent of hospice days. Medicare makes a flat payment per day of about $153 (adjusted for differences in wage rates across geographic areas) for routine home care, regardless of whether the hospice staff visits the patient each day.

Beneficiary cost sharing for hospice services is minimal. There is no cost sharing other than for prescription drugs and inpatient respite care. For prescriptions, hospices may charge 5 percent coinsurance (not to exceed $5) for each prescription furnished outside the inpatient setting. For inpatient respite care, beneficiaries may be charged 5 percent of Medicare's respite care payment per day. In practice, hospices do not generally charge or collect these copayments from Medicare beneficiaries. ■

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Background

The Medicare hospice benefit was established in 1983 to provide beneficiaries at the end of life with an alternative to conventional medical interventions. The benefit covers palliative and support services for terminally ill beneficiaries who have a life expectancy of six months or less (see text box). In 2011, more than 1.2 million Medicare beneficiaries received hospice services, and Medicare expenditures totaled about $13.8 billion.

The Commission's June 2008 and March 2009 reports raised concerns that the structure of the hospice payment system creates financial incentives for very long stays and that CMS does not have adequate administrative controls to check these incentives or ensure providers' compliance with the benefit's eligibility criteria. These reports found:

- a substantial increase in the number of hospices, driven almost entirely by growth in the number of for-profit providers;
- a substantial increase in average length of stay due to increased lengths of stay among patients with the longest stays;
- higher profit margins among hospice providers with longer stays;
- longer stays in for-profit hospices than in nonprofit hospices across all diagnoses;

- anecdotal reports, obtained from a panel of hospice industry experts convened by the Commission, that some hospices admit patients who do not meet the Medicare hospice eligibility criteria (life expectancy of six months or less if the disease runs its normal course) and that some hospice physicians are not engaged in the hospice certification process; and
- focused efforts by some hospices to enroll nursing home residents, a population that tends to have conditions associated with long hospice stays.

Our analyses suggested that these trends were driven in part by a misalignment in Medicare's hospice payment system. Medicare generally makes a flat payment per day for hospice care, but hospice visits are more frequent at the beginning and end of an episode and less frequent in the middle. The mismatch between Medicare payments and hospice visit intensity throughout an episode distorts the distribution of payments across providers, making hospices with longer average stays more profitable than hospices with shorter average stays.

To address these issues, the Commission made recommendations in March 2009 to reform the hospice payment system, to ensure greater accountability in use of the hospice benefit, and to improve data collection and accuracy. In the intervening years, several steps have been taken to increase accountability and data collection via the Patient Protection and Affordable Care Act of 2010 (PPACA) and CMS administrative actions; additional steps are pending. In addition, through PPACA, the Congress gave CMS the authority to revise the hospice payment system as the Secretary determines appropriate no earlier than fiscal year 2014.

In this chapter, we conduct additional analyses to support hospice payment reform and enhanced accountability consistent with the Commission's recommendations. We also explore whether additional changes are needed with regard to Medicare payment for hospice care in nursing facilities. With respect to payment reform, we present a new analysis confirming that the labor costs of hospice visits vary in a U-shaped pattern within a hospice episode and demonstrate how a first step in payment reform is possible with existing data. In terms of accountability, we present a new analysis that underscores the importance of CMS implementing medical review of long hospice stays and new information on the phenomenon of live discharges from hospice. Finally, we explore the potential for a reduction to the hospice payment rate in nursing facilities due to the overlap in services provided by hospice staff and nursing facility staff.

Improving Medicare's payments for hospice services

In March 2009, the Commission recommended that Medicare improve its payments for hospice services by replacing flat per diem payments for routine home care with variable per diem payments that begin at a relatively higher rate and decline as the length of the episode increases, with an additional payment at the end of the episode near the time of death. This recommendation was based on Commission analyses suggesting that flat per diem payments over the course of an episode do not align well with hospice patients' relatively greater use of resources at the beginning and end of hospice episodes.[1] This misalignment between Medicare's payments and hospices' costs creates incentives for providers to enroll patients who are more likely to have long stays because those stays are more profitable than short ones (Medicare Payment Advisory Commission 2009, Medicare Payment Advisory Commission 2008).

The Commission recommended these payment reform changes be budget neutral in the first year. The recommendation for budget neutrality reflects the purpose of the payment reforms, which is to improve payment accuracy within and across hospice episodes and make the distribution of payments more equitable across patients and providers. Whether the aggregate level of payments is at an appropriate level or merits adjustment is a separate question, which we consider each year through our payment update recommendations.

After the Commission's payment reform recommendation, PPACA gave the Secretary of Health and Human Services the authority to revise the hospice payment system in a budget-neutral manner as she determines appropriate as soon as 2014. To date, no regulatory action has been taken on payment reform, although CMS is sponsoring contract research studying the issue and has sought input from industry and other stakeholders.

Since the Commission made its recommendation, claims data on hospice visit patterns have become available. In the online appendixes to our March 2010 and March 2011 reports (available at http://www.medpac.gov), we analyzed patient-level data on hospice visits from a group of 17 nonprofit hospices and Medicare claims data

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2012

from July 2008 through 2009 on the number of hospice visits provided to beneficiaries. Analyses of these data confirmed our earlier findings—the number of hospice visits per week is higher early in a hospice episode and at the end of an episode near the time of a patient's death. These analyses support the need for a payment system that is better aligned with the U-shaped pattern of visits during a hospice care episode.

Beginning in January 2010, more detailed claims data on hospice visits became available, including information on the date and duration of visits. As demonstrated below, these data provide the building blocks for resource use estimates, which have the potential to support a revised payment system. In 2011, hospice spending on patients with stays greater than 180 days totaled nearly $8 billion, more than half of all Medicare's hospice spending that year. Given the magnitude of hospice spending devoted to long-stay patients, who are more profitable than other patients under the current payment system, it is important that an initial step toward payment reform be taken as soon as possible.

Estimating labor costs associated with hospice visits

In this analysis, we used hospice visit time data from Medicare claims for hospice services, combined with data on wage rates and benefits from the Bureau of Labor Statistics (BLS), to estimate the labor costs hospices incur in providing hospice visits. This analysis allowed us to examine the relative resource use within individual hospice episodes and across hospice episodes for patients with different lengths of stay.

In estimating labor costs, we focused on patients receiving routine home care.[2] Routine home care comprises more than 97 percent of hospice days and almost 90 percent of hospice payments. Routine home care can be provided in a variety of settings, including the patient's home, an assisted living facility, a nursing facility, and a hospice facility. In the claims data for routine home care, hospices report the date and length of visits provided by six types of staff: nurses; aides; social workers; and physical, occupational, and speech therapists.[3] The visit time reported on the claim reflects the time spent providing care to the beneficiary (or to the family, in the case of a social worker's visit). Visit time does not include travel time, documentation time, and time spent in interdisciplinary group meetings. In addition to visits, the claims data include information on social workers' phone calls.[4] We combined the data on the six types of visits with social workers' phone calls; for ease of reference, we refer to the combination of these services as "visits."

To estimate labor costs, we multiplied the visit time from the claims by the average wage rate for the type of staff providing the visit and adjusted it to include an estimate of the average benefits paid by employers using BLS data. Through this calculation, we estimated the labor cost of visits for each routine home care day in a beneficiary's hospice episode. Our analysis focused on beneficiaries who enrolled in hospice for the first time between May 1, 2010, and November 30, 2011, and who were discharged by November 30, 2011. If a patient was discharged alive and reentered hospice during the study period, we treated all of that patient's hospice care as one episode.

Labor cost of hospice visits is higher at beginning and end of an episode

Our analysis shows that the average labor cost of visits per day follows a U-shaped trajectory for patients with different lengths of stay, suggesting that episodes of almost all lengths generally have higher visit costs at the episode's beginning and end. Figure 5-1 (p. 124) depicts the average labor cost of visits for each day in the hospice episode for patients discharged deceased with lengths of stay ranging from 7 days to 150 days. For patients with lengths of stay greater than 14 days, the average labor cost per day followed a similar trajectory. Average labor cost per day was highest on the first day, declined for the next few days, and began to flatten out by day 7 to day 10. Average labor cost per day then remained relatively flat until the last seven days of life, when labor cost increased substantially. Patients with lengths of stay of 7 days or 14 days also showed a U-shaped trajectory; however, the average labor cost per day in the middle of the episode was higher than for patients with stays of more than 14 days.

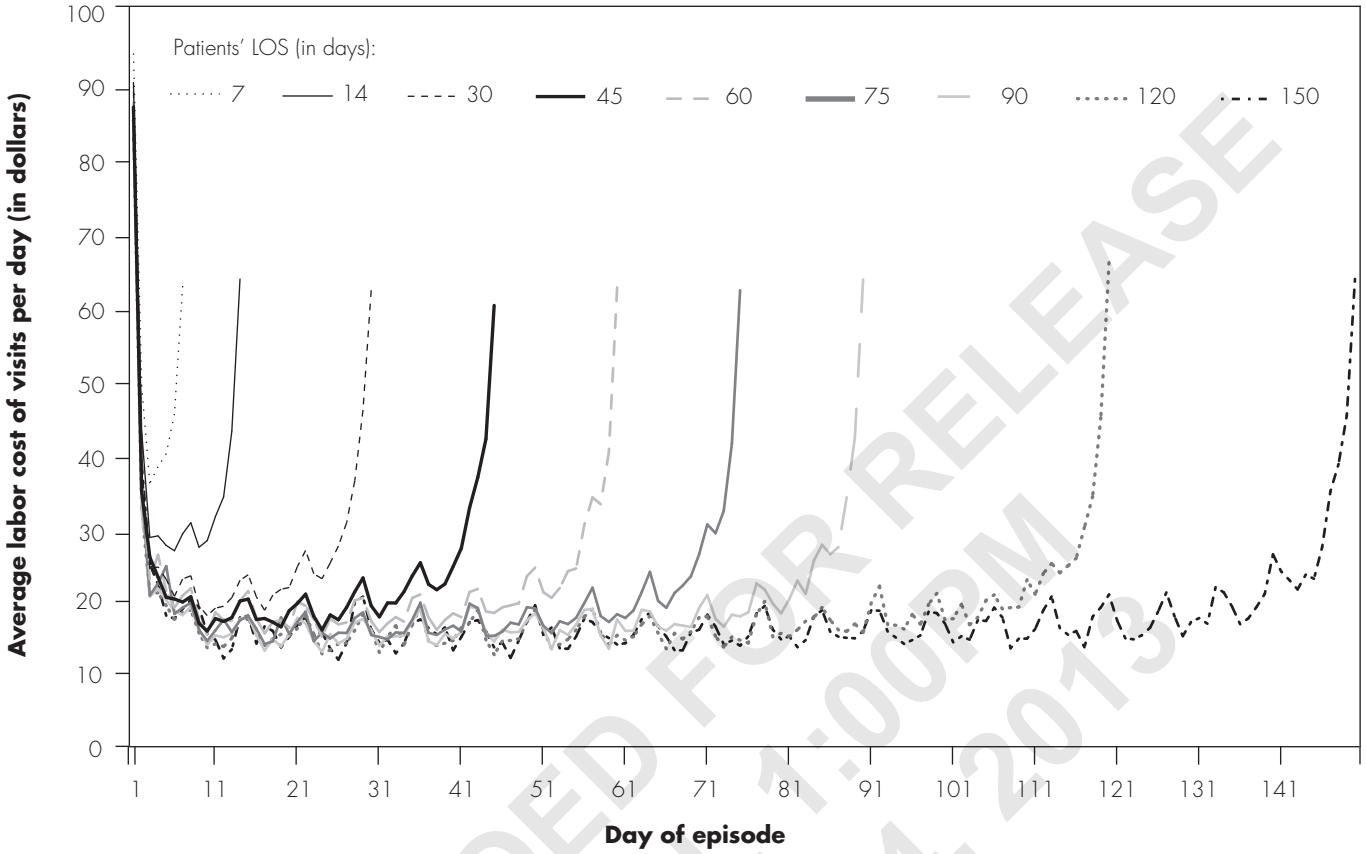
Figure 5-2 (p. 125) includes more detail on shorter stays, showing a U-shaped trajectory for stays ranging from 4 days to 14 days. Patients with different lengths of stay in this range all had higher visit intensity at an episode's beginning and end, but the average labor cost of visits per day overall was higher the shorter the stay. Stays of 1 day to 3 days had the highest average labor cost per day, with 1-day stays having the highest cost of all.

We also found that the average labor cost of visits throughout an episode was similar for patients with different primary diagnoses (Figure 5-3, p. 126). Across all diagnoses examined, we observed higher labor cost of visits per day at an episode's beginning and end near

EMBARGOED FOR RELEASE UNTIL 10AM JUNE 14, 2013

FIGURE 5–1

Average labor cost of visits by day for hospice patients discharged deceased with selected lengths of stay (7–150 days)



Note: LOS (length of stay). Data include only those beneficiaries who were first admitted to hospice between May 1, 2010, and November 30, 2011, and were discharged deceased by November 30, 2011. The figure reflects only days the patient received routine home care. Length of stay reflects the number of days the beneficiary received hospice care during the time period.

Source: MedPAC analysis of Medicare hospice 100 percent standard analytic file and the common Medicare enrollment file from CMS.

EMBARGOED FOR RELEASE UNTIL 1:00 PM JUNE 14, 2013

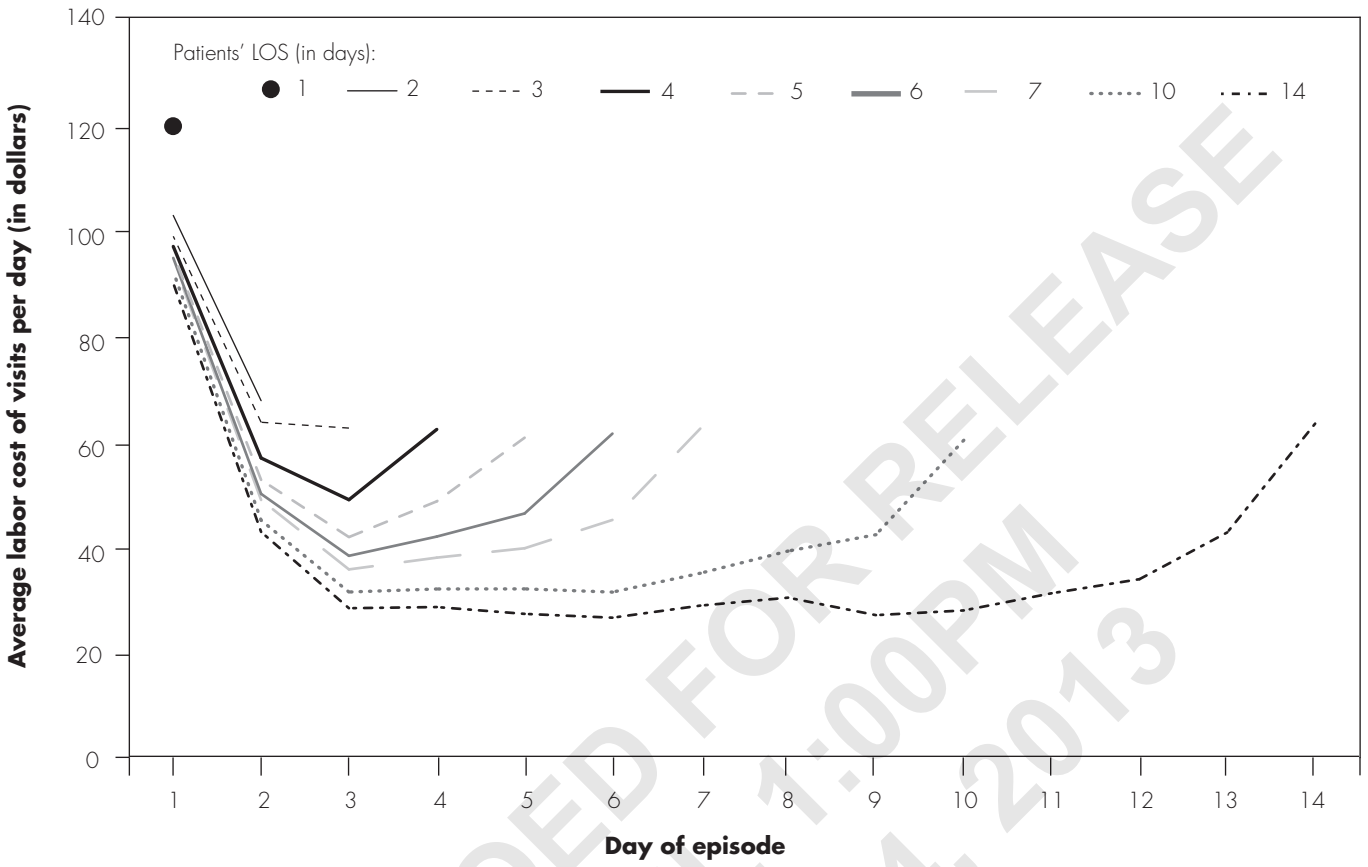
the time of death, with lower costs in the middle. Figure 5-3 (p. 126) demonstrates that length of stay, rather than diagnosis, is the main driver of visit costs.

By combining the data for all beneficiaries across all lengths of stay and type of discharge (alive or deceased), we obtain an overall picture of the average labor cost of visits for each day in a hospice stay. On average, labor cost was highest on the first day of the stay, exceeding $86 (Figure 5-4, p. 127). Average labor cost per day declined rapidly in the first few days of the stay (falling from about $37 on day 2 to $23 on days 3–4, and to $21 on days 5–7). Labor cost per day continued to decline modestly through 30 days (an average of about $18 on days 8–14 and $17 on days 15–30). After day 30, the average labor cost of visits was relatively flat at roughly $15 per day. Labor cost per day increased substantially in the last seven days of life from an average of $30 six days before death to about $64 on the day of death.

Given the pattern in these data, it is clear why longer stays in hospice are more profitable than shorter stays. Medicare pays a flat rate of about $153 per day for routine home care in fiscal year 2013, but the resource use associated with nurses, aides, social workers, and therapists is greater at the beginning and end of episodes. At the same time, resource use is much lower during the middle portion of episodes. As a result, providers' profit

FIGURE 5–2

Average labor cost of visits by day for hospice patients discharged deceased with selected lengths of stay (1–14 days)



Note: LOS (length of stay). Data include only those beneficiaries who were first admitted to hospice between May 1, 2010, and November 30, 2011, and were discharged deceased by November 30, 2011. The figure reflects only days the patient received routine home care. Length of stay reflects the number of days the beneficiary received hospice care during the time period.

Source: MedPAC analysis of Medicare hospice 100 percent standard analytic file and the common Medicare enrollment file from CMS.

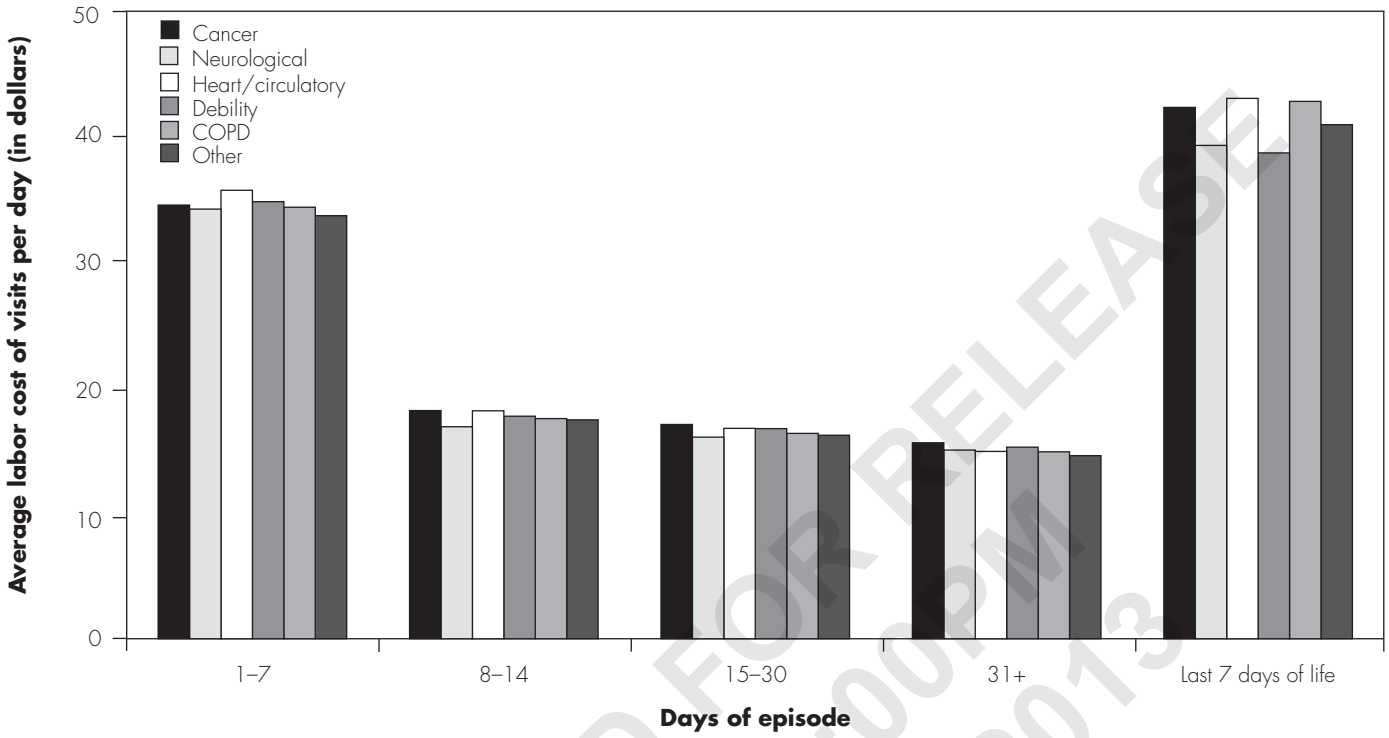
EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

margins are higher during the middle portion of episodes. Episodes that are longer have more of the profitable "middle days." The result is that long stays in hospice are more profitable than short stays. As the Commission has noted previously, the incentives for long stays are a concern because they may have spurred some providers to pursue business models that enroll patients likely to have long stays who may not meet the hospice eligibility criteria. This mismatch between Medicare payments and hospice visit intensity throughout an episode also distorts the distribution of payments across patients and providers, making hospices with longer stays more profitable than hospices with shorter stays.

Using available data to improve hospice payments: An illustrative example

As described above, available data on the average labor cost of visits offer policymakers the evidence needed to begin reforming the payment system. Some industry stakeholders have raised concerns about the comprehensiveness of available data and have urged that payment reform wait until more data are available. For example, they point out that the claims data reflect only the labor costs associated with visits by nurses, aides, social workers, and therapists and do not reflect nonlabor costs such as drugs, supplies, and equipment. They also express concern about the lack of data on chaplain visits. Some have also expressed concern about Medicare cost

FIGURE 5–3 **Average labor cost of routine home care visits per day is similar across diagnoses**



Note: COPD (chronic obstructive pulmonary disease). Data include only those beneficiaries who were first admitted to hospice between May 1, 2010, and November 30, 2011, and were discharged by November 30, 2011. The figure reflects only days the patient received routine home care. Data for the last seven days of life are excluded from all bars except the ones labeled "last 7 days of life."

Source: MedPAC analysis of Medicare hospice 100 percent standard analytic file and the common Medicare enrollment file from CMS.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

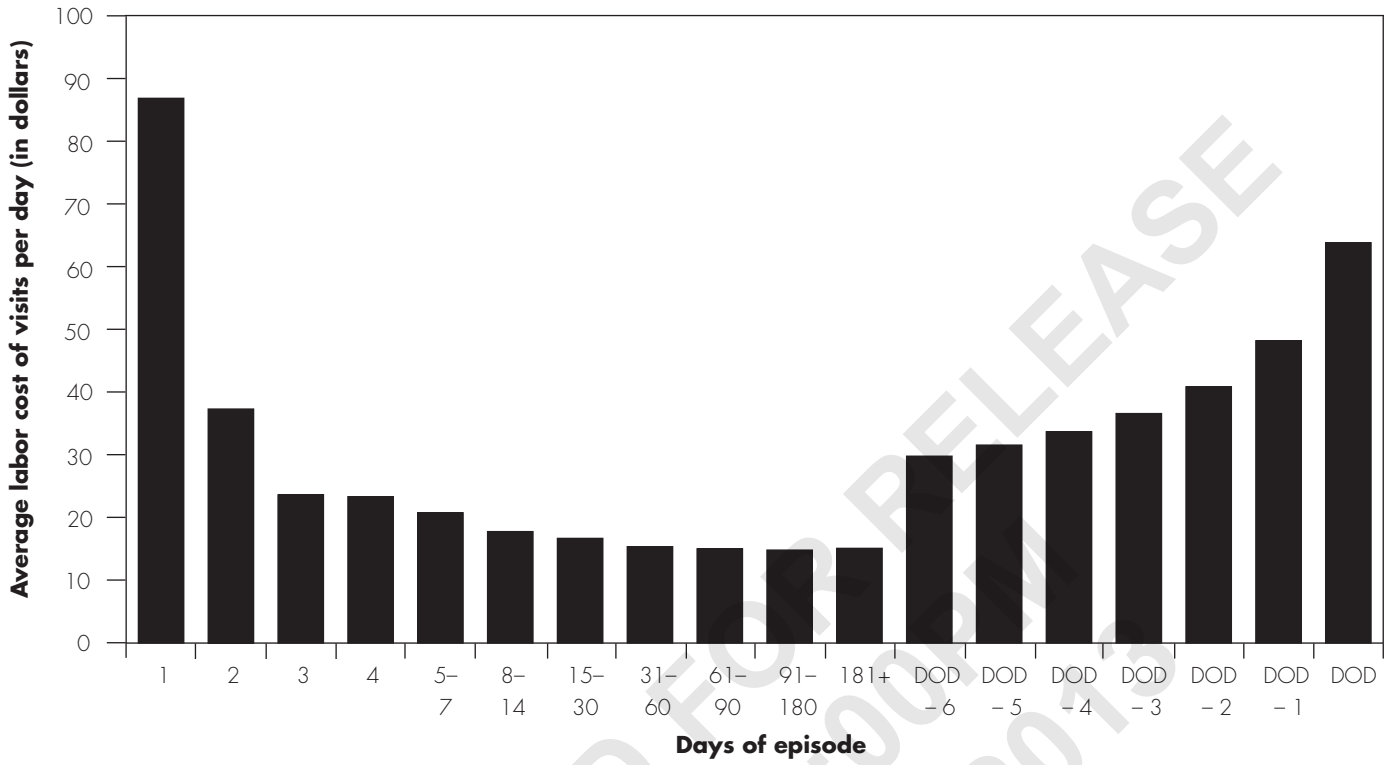
report data, particularly the accuracy of the data. In addition to concerns voiced by industry, CMS notes that most hospice claims identify only a primary diagnosis but not secondary diagnoses. In the fiscal year 2013 hospice *Federal Register* notice, CMS stated that hospices are required to report patients' secondary diagnoses, noting that the current lack of such information limits the agency's ability to assess whether case-mix adjustment is needed.

Despite the concerns voiced about existing data, a first step on payment reform is possible using available data. The Commission has developed an approach that relies almost entirely on claims data and BLS wage data, with very minimal use of cost report data. This approach should allay concerns about the accuracy of the cost report data. Our approach also addresses the lack of patient-level data on nonlabor costs and chaplain visits by adjusting only a portion of the hospice base rate rather than the full base rate. Our approach does not address the lack of data on secondary diagnoses on claims; however, we note that more expansive diagnosis information might be obtained from claims data for prehospice services. Also, as shown previously, we observe only modest differences in the average labor cost of visits by episode day across patients with different primary diagnoses.

Using data currently available, we developed an approach to setting hospice payment rates that better align with the resources used during a patient's hospice episode. To construct our illustrative payment model, we used our estimates of average labor cost of visits based on the visit time data from patient claims and the BLS data on wage rates and benefits. We assigned hospice days to one of five categories: days 1–7, days 8–14, days 15–30, days 31 and beyond, and the last 7 days of life.[5] Although our analysis

FIGURE 5–4

Average labor cost of routine home care visits per day across all patients



Note: DOD (date of death). DOD – 1 means one day before the date of death. Data for the last seven days of life are reported only in the seven DOD bars. Data include only those beneficiaries who were first admitted to hospice between May 1, 2010, and November 30, 2011, and were discharged by November 30, 2011. The figure reflects only days the patient received routine home care.

Source: MedPAC analysis of Medicare hospice 100 percent standard analytic file and the common Medicare enrollment file from CMS.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

found that the first day of a hospice episode has much higher costs than subsequent early days, we chose to group days 1–7 together to avoid creating an extremely high payment rate on day 1 that might encourage 1-day stays. We estimated the average labor cost of visits per day for days 1–7, days 8–14, days 15–30, and days 31 and beyond, excluding any days in these categories that were the last 7 days of life. We also estimated the average additional labor cost for the last seven days of an episode compared with the same days of episodes that were not "last days." (This approach allowed us to estimate the additional costs of the last seven days of a stay to calculate a fixed add-on payment.) We converted the average labor cost per visit for the five groups into relative values and applied these values to the hospice base rate for routine home care to calculate the effective payment rate.[6] We adjusted the new payment rates to achieve budget neutrality in the first year under the assumption of no behavioral change.

Since the claims data do not include information on nonlabor items (e.g., drugs, supplies, and equipment) and chaplain visits, we applied our illustrative relative weights to a portion of the hospice payment rate based on the share of hospice costs attributable to those services for which we have data. We estimated that labor costs associated with the six categories of personnel included in the claims data account for at least 68 percent of hospices' direct costs. Accordingly, we adjusted 68 percent of the hospice payment rate for routine home care by our illustrative relative weights; the remaining 32 percent of the payment was unchanged.

Table 5-1 (p. 128) shows the payment weights and payment rates that resulted in our illustrative payment model. Compared with the current flat per diem payment rate, our model's per diem rate increases for the first 14 days of the stay, declines for days 15 and beyond, and is

TABLE 5–1

Illustrative example of payment weights and per diem payment rates under a U-shaped cost curve approach

Days in episode	Percent of RHC days, 2011	Average labor cost of visits per day	Relative weight	Illustrative RHC per diem payment rate, weights applied to 68% of base rate ($153.45)	Percent change in payment rate
1–7	5%	$34.59	1.97	$254.77	66%
8–14	4	17.78	1.01	154.82	1
15–30	8	16.64	0.95	148.07	–4
31+	78	15.08	0.86	138.78	–10
Last 7 days of life	5	20.11 plus applicable amount above	1.15 plus applicable weight above	119.63 plus applicable rate above	68–144 depending on LOS

Note: RHC (routine home care), LOS (length of stay). Payment rates in the chart are illustrative of an approach to revising the hospice payment system using currently available data. Rates apply only to routine home care; rates for other levels of care are unchanged. The add-on payment for the last seven days of life applies only to patients discharged deceased and is added on to the daily payment rate that would apply for those days if they were not the last seven days.

Source: MedPAC analysis of hospice claims and the common Medicare enrollment file from CMS and the wage rates and benefits from the Occupational Employment Statistics and the Employer Cost for Employee Compensation from the Bureau of Labor Statistics.

TABLE 5–2

Effects of illustrative payment system vary as a function of length of stay

Category of hospice	Percent change in total payments
Share of stays over 180 days (in quintiles)	
Lowest quintile	6.7%
Second quintile	2.9
Third quintile	–0.3
Fourth quintile	–2.0
Highest quintile	–3.7
Freestanding	–0.9
Home health based	3.5
Hospital based	4.1
For profit	–1.5
Nonprofit	1.6
Urban	–0.1
Rural	1.0

Note: Estimates of effects reflect the change in routine home care payments providers would receive under our illustrative payment model as a percent of all revenues providers receive from Medicare (for routine home care and other types of hospice care). Payment estimates are before application of the Medicare hospice cap.

Source: MedPAC analysis of hospice claims and cost report data from CMS.

higher in the last 7 days of life regardless of length of stay. Our model's per diem payment rate is 66 percent higher than the current payment rate for the first 7 days of the stay and 1 percent higher than the current rate for days 8–14. However, the per diem payment rate in our model is 4 percent lower than the current rate for days 15–30 and 10 percent lower for days 31 and beyond. In our model, the hospice would receive a fixed add-on payment of about $120 per day on each of the last seven days of the hospice patient's life. These add-on payments, when added to our model's per diem payment rates for those days, result in total payments during the last seven days of life that are between 68 percent and 144 percent higher than current payments.[7]

Variable per diem payments, such as the ones illustrated here, would better align payments with providers' costs, thereby reducing the incentives for hospices to seek out very-long-stay patients and to avoid patients who are likely to have shorter stays. While the illustrative per diem payment rates for days 15 and beyond are lower than current per diem rates, combined total payments for many episodes are higher in our model than under current policy. In our model, higher per diem payment rates in the first 14 days of an episode and add-on payments for the last 7 days of life result in higher total payments than under current policy for all episodes with lengths of stay

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

TABLE 5–3 **Effects of illustrative payment system vary within each hospice type**

Category of hospice	Percent of hospices in category with: Payment decline > 2 percent	Payment change < 2 percent	Payment increase > 2 percent
All	30%	31%	39%
Share of stays over 180 days			
Lowest quintile	1	7	92
Second quintile	2	27	71
Third quintile	10	69	21
Fourth quintile	47	47	6
Highest quintile	90	6	4
Freestanding	39	35	25
Home health based	10	23	67
Hospital based	6	21	73
For profit	44	35	21
Nonprofit	11	28	61
Urban	33	34	33
Rural	23	25	52

Note: Estimates of effects reflect the change in routine home care payments providers would receive under our illustrative payment model as percent of all revenues providers receive from Medicare (for routine home care and other types of hospice care). Payment estimates are before application of the Medicare hospice cap.

Source: MedPAC analysis of hospice claims and cost report data from CMS.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

up to 130 days for patients discharged deceased and up to 73 days for patients discharged alive. For longer episodes, total payments under our model are lower than under current policy. In our model, payment weights are set to achieve budget neutrality so overall aggregate spending is unchanged. As noted previously, we maintain budget neutrality in our model for routine home care because this effort is intended to improve payment accuracy for routine home care within and across hospice episodes and distribute these payments more equitably across patients and providers. Whether changes are needed in the aggregate level of payments for routine home care, as well as other levels of care, is a separate issue that could be considered in the future.

The effect of the illustrative payment rates on total payments to providers varies by hospice length of stay (Table 5-2). Aggregate payments to the 20 percent of hospices with the smallest share of stays exceeding 180 days would increase by 6.7 percent, while aggregate payments to the 20 percent of hospices with the greatest share of stays exceeding 180 days would decrease by 3.7 percent. Aggregate payments to for-profit hospices would decline by 1.5 percent, while payments to nonprofits would increase by 1.6 percent. Aggregate payments to freestanding facilities would decline by 0.9 percent, while payments would increase by 3.5 percent for home-health-based hospices and by 4.1 percent for hospital-based hospices. Rural hospices would see their aggregate payments increase by 1.0 percent. These shifts are driven by the payment system's impact as a function of length of stay: Freestanding and for-profit hospices tend to have patients with longer hospice stays than provider-based and nonprofit hospices and would see a decrease in their payments on average. Nonprofit hospices, provider-based hospices, and rural hospices—which traditionally have had lower Medicare margins—would see an increase in their payments on average.

Within each provider category, the effect of the payment system changes would vary across individual providers based on the extent to which the provider tends to serve patients with long stays. For each category of hospice, Table 5-3 shows the proportion of hospices that would

TABLE 5–4 **Effects of illustrative payment system revision on margins by length of stay for freestanding, below-cap hospices**

Hospices grouped by share of stays >180 days (in quintiles)	2010 margin	Simulated 2010 margin if revenues changed by the amount projected in our illustrative model
Lowest quintile	–1.3%	4.0%
Second quintile	5.9	7.8
Third quintile	12.2	11.7
Fourth quintile	15.8	14.0
Highest quintile	16.6	13.5

Note: The 2010 simulated margins reflect our estimate of what the 2010 margins would be if payments to providers changed by the percent estimated in our illustrative payment model. Margins are before the application of the Medicare aggregate cap.

Source: MedPAC analysis of hospice claims and cost report data from CMS.

experience payment changes of various magnitudes (i.e., payments increase by more than 2 percent, change by less than 2 percent, and decrease by more than 2 percent). In our payment model, a majority of hospices that are hospital- or home-health-based, nonprofit, and rural experience a payment increase greater than 2 percent. In comparison, a smaller proportion (between 21 percent and 33 percent) of freestanding, for-profit, and urban hospices experience a payment increase greater than 2 percent.

Since one objective of this type of reform is to lessen the relationship between length of stay and profitability that exists under the current payment system, we simulated the effect of the illustrative relative weights on 2010 margins by length of stay for freestanding providers that did not exceed the aggregate payment cap under current policy. We focused on freestanding providers because, unlike their institution-based counterparts, their margins are not affected by the allocation of overhead from the parent provider. We focused on below-cap hospices so that we could focus exclusively on profitability related to the underlying payment system and not the aggregate cap.[8] Under the current payment system, freestanding below-cap providers in the lowest quintile in terms of the share of stays greater than 180 days had an aggregate margin of –1.3 percent in 2010, while providers in the highest quintile of share of stays greater than 180 days had an aggregate margin of 16.6 percent (Table 5-4).

With changes in payments of the magnitude estimated in our illustrative example, the gap in margins across providers with different lengths of stay would narrow but not be eliminated. In our example, the payment increases for shorter episodes would be large enough to push the margins of freestanding providers in the lowest length-of-stay quintile from negative to positive, while the aggregate margin of providers in the two longest length-of-stay quintiles would decline about 2 to 3 percentage points.

Our margin data suggest that payment rate changes larger than those made under our model would likely be necessary to eliminate the higher profitability of longer stays. Regardless of the initial magnitude, however, our approach takes a first step in the direction of realigning payments commensurate with resources used rather than a flat payment per day. This approach has the strength that it could be done now with additional changes possible as more data become available. For example, CMS has sought comment from the industry on potential additional data collection, including possibly claim-level visit reporting by more types of personnel (chaplains and nutritional or other counselors) and claim-level reporting on durable medical equipment, supplies, and drugs. A decision on whether such data will be collected has not been announced. Even if such data were to be collected in the future, that possibility should not delay a first step toward payment reform by adjusting a portion of the payment rate based on the current visit data.

Improving hospice accountability

Even with payment reform, there will still be a need to ensure that hospice providers comply with the benefit's eligibility criteria. While payment reform will lessen the difference in profitability by length of stay, long stays are likely to remain profitable. Our prior reports found that additional administrative controls are necessary to balance the incentives for very long stays in hospice. In addition, while there are many reasons for live discharges from hospice, unusually high rates of live discharge can be a symptom of questionable provider behavior with respect to patient eligibility. In this section, we present new analysis that underscores the importance of CMS implementing medical review of very long stays to ensure that providers are complying with the eligibility criteria. This section also examines the issue of live discharges from hospice, focusing on patients with long stays. Mechanisms to increase provider accountability, including monitoring for

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 15, 2012

providers with particularly high rates of live discharge, could improve fiscal responsibility in the hospice program.

Medical review and other administrative actions

Our June 2008 and March 2009 reports found that the hospice benefit lacked adequate administrative and other controls to check the incentives for long stays in hospice (Medicare Payment Advisory Commission 2009, Medicare Payment Advisory Commission 2008). These reports raised concerns that the structure of the hospice payment system, which makes long stays more profitable than short stays, has led to substantial growth in very long hospice stays over the past decade. Since 2000, we have seen substantial growth in the longest hospice stays, while short stays have remained unchanged. For example, the 90th percentile in length of stay among Medicare decedents increased between 2000 and 2011 from 141 days to 241 days. Furthermore, length of stay is substantially higher among some diagnoses; for example, in 2011, the 90th percentile in length of stay among decedents was 423 days for patients with neurological conditions and 318 days for those with chronic obstructive pulmonary disease, compared with 241 days for hospice decedents overall. Hospice providers that exceed Medicare's annual aggregate spending cap for hospice services typically have substantially longer stays and higher live discharge rates compared with other hospices, suggesting that they enroll patients likely to have long stays who may not meet the eligibility criteria. While below-cap hospices as a group have fewer patients with stays exceeding 180 days, substantial variation exists in the prevalence of stays beyond 180 days among below-cap providers.

A Commission-convened panel of hospice medical directors and executives in the fall of 2008 provided anecdotal information suggesting that some hospices were enrolling patients who did not meet the eligibility criteria (Medicare Payment Advisory Commission 2009). While panelists discussed the challenges all hospices face in predicting life expectancy for certain diseases, they described behavior by a subset of providers that appeared to go beyond the inherent difficulties of predicting life expectancy and suggested possibly intentional disregard of the Medicare hospice eligibility criteria by some providers. Panelists also indicated that a lack of engagement in the certification process among some hospice physicians contributed to lax compliance with the eligibility criteria among some hospices. On the basis of the panel's input, the Commission recommended several steps to increase accountability, including:

- a requirement that certifications and recertifications include a physician narrative describing the clinical basis for the prognosis,
- a requirement for a hospice physician or nurse practitioner to have a face-to-face visit with a patient before the 180th day for recertification and subsequent recertifications, and
- a recommendation that CMS conduct medical review of all stays beyond 180 days for providers for whom these stays make up an unusually large share of their caseload.

Measures consistent with the first two parts of this recommendation—physician narrative and face-to-face visit requirements—have been adopted through PPACA and CMS administrative action (effective October 2009 and April 2011, respectively). Both of these initiatives are intended to strengthen hospice physician engagement in the certification and recertification processes. PPACA also includes, consistent with the third part of our recommendation, a CMS medical review requirement focused on hospices with an unusually large share of long-stay patients. To date, CMS has not implemented the medical review provision.

In 2011, Medicare hospice spending on patients with stays that exceeded 180 days was nearly $8 billion, more than half of all Medicare hospice spending that year (Table 5-5, p. 132).[9, 10] These patients accounted for about 20 percent of Medicare beneficiaries who used hospice in 2011. The significant amount of Medicare hospice expenditures on patients with stays exceeding 180 days underscores the need for CMS to have effective medical review procedures to help ensure that the benefit eligibility criteria are being followed. Because of uncertainty in predicting life expectancy, it is expected that some hospice stays will exceed 180 days. However, the current incentives in the payment system for long stays, the anecdotal reports of questionable enrollment practices by some hospices, and the wide variation in length of stay across providers suggest that there are vulnerabilities in the current system that need strengthening. Implementing the PPACA medical review provision would be a valuable step in that direction.

In 2011, Medicare spent about $2.7 billion on additional hospice care for patients who had already received at least one year of hospice (Table 5-5). Hospice stays that surpass one year raise questions about whether hospice is being used as a long-term care benefit and suggest that additional steps may be warranted beyond the PPACA

EMBARGOED FOR RELEASE UNTIL 1:00 PM JUNE 13, 2013

TABLE 5–5

Over half of Medicare hospice spending in 2011 was on patients whose stays exceeded 180 days

Category	Medicare hospice spending, 2011 (in billions)
All hospice users in 2011	$13.8
Beneficiaries with LOS > 180 days	7.9
Days 1–180	2.6
Days 181–365	2.5
Days 366+	2.7
Beneficiaries with LOS ≤ 180 days	5.9

Note: LOS (length of stay). LOS reflects the beneficiary's lifetime LOS as of the end of 2011 (or at the time of discharge in 2011 if beneficiary is not enrolled in hospice at the end of 2011). All spending reflected in this table occurred only in calendar year 2011. Numbers may not sum to totals due to rounding.

Source: MedPAC analysis of hospice claims and the common Medicare enrollment file from CMS.

medical review provision and the other accountability measures already implemented (i.e., physician narrative and face-to-face visit requirement). One question that could be explored is whether there should be a patient-level length-of-stay threshold (e.g., at one year or two years) that triggers medical review for any provider. For example, it might be beneficial once length of stay reaches a certain threshold to consider instituting a new policy requiring hospice providers to submit information to the Medicare claims-processing contractors for medical review of a patient's hospice eligibility before Medicare makes additional payments to the hospice for that patient.

Live discharge from hospice

Building on research in previous Commission reports, we conducted a closer examination of the issue of patients who are discharged from hospice alive, particularly focusing on patients discharged alive after long stays. The Commission previously reported on the frequency of live discharges (Medicare Payment Advisory Commission 2013a), but little is known regarding what happens to patients after the discharge. We have expanded previous analyses by examining patterns of patients' return to hospice, their life span after discharge, variations in patterns by hospice and patient characteristics, and service use and associated expenditures after patients are discharged alive (see text box).

There are many reasons live discharges can occur, and some live discharges are expected. Some beneficiaries change their perspective about the type of care they want and decide to revoke hospice to pursue conventional care, including potentially life-prolonging therapies (Johnson et al. 2008). In other cases, if a beneficiary or family member deviates from the beneficiary's plan of care, the hospice is not required to cover services, leading the patient or the family to revoke hospice rather than bear the cost.[11] Other beneficiaries experience improved health in hospice, often referred to as the "hospice effect," or their conditions become more stable to the point that clinicians no longer estimate a life expectancy of six months or less. Accurate prediction of survival time is difficult and has been shown to be particularly difficult for patients with some noncancer illnesses, which are typically characterized by exacerbations and remissions (Kutner et al. 2004).[12]

However, unusually high rates of patients discharged alive among some providers raise concerns about questionable business practices and potential quality-of-care issues. In particular, some hospices may pursue business models that seek patients likely to have long stays, even if they may not meet the hospice eligibility criterion of having a life expectancy of six months or less. Higher rates of live discharge are one indication of this practice, as providers may discharge these long-stay patients when the hospice incurs liabilities toward the payment cap. The Commission previously reported evidence of longer stays

TABLE 5–6

Distribution of live discharge rates among all hospices, 2010

Quartiles of providers ranked by live discharge rate	Average live discharge rate
First quartile	11%
Second quartile	17
Third quartile	25
Fourth quartile	38

Note: Live discharge rate is the rate among all hospice episodes in 2010, followed through April 2012.

Source: Acumen analysis of Medicare claims data.

EMBARGOED FOR RELEASE UNTIL 10PM JUNE 14, 2013

Methodology used to examine issues associated with live discharge

We worked with Acumen, LLC, to construct hospice episodes from claims for all episodes from 2008 through 2010. For each of the three years, we identified beneficiaries with a first live discharge in that year and defined the follow-up period as 365 days after discharge or until the beneficiary's death, whichever was earlier. We created an additional cohort with a first episode ending in live discharge in 2008 and analyzed claims from 2008 through April 2012. We limited the population to beneficiaries enrolled in Medicare Part A and Part B during their hospice episodes and the entire follow-up period. We excluded patients who died the same day as the live discharge with no claim for any other services. We also performed a set of regression analyses to control for patient characteristics (sex, age, diagnosis at admission, and length of stay before discharge) and hospice characteristics (tax status, provider type, urbanicity, chain affiliation, regional location, cap status, percentage of cancer episodes, and percentage of neurological episodes). ■

and higher frequencies of patients being discharged alive among above-cap hospices compared with other hospices (Medicare Payment Advisory Commission 2013a).

Live discharges more common among certain types of providers

Of the 1.2 million hospice episodes in 2010, 18 percent ended in live discharge.[13] Live discharge rates varied widely by provider, ranging from 11 percent in the quartile with the lowest rates to 38 percent in the quartile with the highest rates (Table 5-6).

Certain provider characteristics were associated with higher rates of live discharge. For-profit hospices were about 20 percent more likely than nonprofit hospices to discharge patients alive, and above-cap hospices were almost twice as likely as below-cap hospices to discharge patients alive (Table 5-7, p. 134). We also found that patients discharged alive from above-cap hospices were more than 20 percent more likely to be alive 180 days after discharge than patients discharged alive from below-cap hospices.

Beneficiaries with noncancer diagnoses were more likely to be discharged alive. For example, the live discharge rate among debility patients was almost three times higher than that of patients with lung and other chest cavity cancers. Overall, the live discharge rate for noncancer diagnoses was 1.7 times higher than the rate for cancer diagnoses. However, we found associations between live discharge rates and certain provider characteristics that were significant even after controlling for the proportion of cancer diagnoses among providers.

Long stays before discharge associated with long survival after discharge

Given concerns that some providers may be enrolling patients who do not meet the eligibility criteria and then discharging them, we focused on beneficiaries discharged alive after long stays and examined their patterns of care and survival postdischarge. Almost 30 percent of all hospice patients discharged alive in 2010 had hospice stays of 181 days or more before they were discharged (Table 5-8, p. 135). Many of these beneficiaries had long survival times after their long hospice episodes. In 2010, of beneficiaries discharged alive after hospice stays of at least 181 days, 73 percent were still alive 180 days after discharge. More than half (56 percent) were alive one year after discharge.

In total, 43 percent of all beneficiaries discharged alive in 2010 were still alive one year after discharge. (Of these beneficiaries, almost one-third returned to hospice care during the year.) These beneficiaries spent an average of 213 days in hospice before their first discharge, with Medicare hospice payments for these first episodes totaling $1.2 billion.

We examined Medicare spending after discharge from hospice for patients who were discharged alive. Average spending per day on Medicare services after discharge from hospice was highest for beneficiaries who had spent seven or fewer days in hospice and decreased as the length of time spent in hospice increased. For beneficiaries discharged alive after hospice stays of 181 days or more, average Medicare spending after hospice discharge was $70 per day, less than half the average per diem payment rate of $156 for hospice care.[14] This comparison is

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

TABLE 5–7 **Hospice characteristics associated with live discharge, 2010**

Provider characteristic	Live discharge rate	Odds ratio (95% CI)	Alive at 180 days postdischarge	Odds ratio (95% CI)
Tax status				
Nonprofit	15%		55%	
For profit	21	1.21 (1.20–1.23)	58	0.95 (0.92–0.99)
Government	16	1.05 (1.03–1.07)	55	NS
Ownership status				
Freestanding	19		57	
Hospital	13	0.92 (0.90–0.93)	55	NS
SNF	17	NS	61	NS
HHA	17	1.10 (1.09–1.12)	55	NS
Urban/rural				
Urban	20		57	
Rural	17	0.84 (0.83–0.85)	57	0.94 (0.90–0.97)
Aggregate cap status				
Below	16		56	
Above	36	1.99 (1.95–2.02)	64	1.22 (1.16–1.28)

Note: CI (confidence interval), NS (not significant), SNF (skilled nursing facility), HHA (home health agency). Live discharge rate is the rate among all hospice episodes in 2010, followed through April 2012. The odds ratio refers to the odds of a patient being discharged alive from the given provider type (or being alive at 180 days postdischarge) compared with the referent provider type in each category.

Source: Acumen analysis of Medicare claims data.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

conservative since the figure for spending after discharge includes spending for all care (i.e., related to the terminal condition and not related to the terminal condition), while the daily payment rate for hospice care includes only Medicare's payment for care related to the terminal condition, and hospice enrollees can incur additional Medicare spending above this amount to treat conditions unrelated to their terminal disease or illness. The difference between total Medicare spending before and after discharge from hospice thus may be even larger. The low level of postdischarge spending for these beneficiaries suggests a comparatively low service use consistent with conditions that are relatively stable.

Furthermore, spending for beneficiaries postdischarge was clustered around the last days of life, supporting evidence in the literature that savings are associated with hospice when patients are relatively close to death but not in cases of very long survival times (Kelley et al. 2013). Following a cohort of beneficiaries discharged alive in 2008 (followed through April 2012 or end-of-life if earlier), we found that beneficiaries who died out of hospice had average spending within 30 days of death of $330 a day, compared with $107 a day for their total time out of hospice (average of 297 days out of hospice).

These data highlight key patterns in live discharges from hospice. Some rate of live discharge from hospice is expected because beneficiaries may revoke their hospice benefits for many reasons; there will also always be some patients discharged by the hospice because they no longer meet the eligibility criteria, particularly given the challenges in predicting a patient's survival time. However, we found that beneficiaries with long stays represent a sizable portion of live discharges, and long stays before discharge are associated with long survival after discharge. Evidence of very long survival postdischarge among some beneficiaries supports the need for additional mechanisms to ensure beneficiaries are appropriate candidates for hospice at initial admission and throughout long episodes.

TABLE 5–8 **Outcomes postdischarge by length of stay in hospice, 2010**

Length of stay in hospice before live discharge (in days)	Percent of all live discharges	Average days out of hospice	Percent alive at 180 days postdischarge	Average Medicare spending per day postdischarge
1–7	10%	94	27%	$242
8–14	8	107	33	219
15–30	11	116	37	204
31–60	11	140	47	161
61–90	14	208	66	85
91–180	18	203	67	92
181+	29	213	73	70
Overall		172	57	111

Note: Data reflect patients discharged alive in 2010 and followed for up to 365 days after discharge. Average days out of hospice reflects the number of days after discharge until reentry to hospice or death.

Source: Acumen analysis of Medicare claims data.

Furthermore, high rates of live discharge among some providers may indicate questionable business practices. Monitoring live discharge rates and causes among providers could improve quality and fiscal responsibility in the hospice program.

Hospice provided in nursing facilities

Beyond the payment reforms discussed in an earlier section, the Commission previously raised the issue of whether a different payment structure is needed for hospice care in nursing facilities. Our prior work has shown that hospices that have more patients in nursing homes than other hospices have higher margins (Medicare Payment Advisory Commission 2013b). We have noted that the higher profitability among hospices serving more nursing facility patients may be due partly to the diagnosis profile and length of stay of the patients they serve. However, hospices may find caring for patients in nursing facilities more profitable than caring for patients at home for reasons in addition to length of stay. There may be efficiencies in treating hospice patients in a centralized location in terms of mileage costs, staff travel time, and as a referral source for new patients. A hospice may also realize efficiencies in caring for a patient in a nursing facility because of the overlap in patient care responsibilities between the hospice and the nursing facility. In this section, we review the Commission's concerns about hospice care in nursing facilities and present two new Commission analyses, examining hospice providers' patient clusters at individual nursing facilities and hospice aide visits at nursing facilities, which suggest a reduction to the hospice payment rate in nursing facilities may be warranted.

Concerns about Medicare's payment system for hospice care delivered in nursing homes

The Commission's prior work highlighted the need for greater oversight of hospice care provided in nursing facilities and raised questions about whether a different payment level is appropriate for hospice care in nursing facilities. The Commission's concerns were based on several factors. A Commission-convened expert panel of hospice providers and researchers in October 2008 raised concerns about some hospices' relationships with nursing facilities. Panelists cited instances of some hospices aggressively marketing their service to nursing facility residents who were likely to have long lengths of stay. At the extreme, some industry sources described instances of hospice staff approaching the families of nursing facility residents with neurological diseases, offering the family "extra assistance" for the patient, without mentioning the word "hospice." Other panelists and industry sources have described situations suggesting conflicts of interest in the referral relationships between some nursing homes and hospices. For example, common ownership, a shared medical director, and other financial or in-kind transfers between some hospices and nursing facilities provide financial incentives for some nursing facilities to refer patients to hospice and steer them to particular hospice

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

TABLE 5–9

Over 60 percent of hospice nursing home days occur in facilities where the hospice has at least 3 patients under its care

Number of patients in an individual nursing facility under the care of the same hospice provider on the same day	Percent of hospice nursing home days, 2011
1	14.8%
2	12.5
3	10.7
4	8.9
5–9	27.1
10–19	13.4
20+	2.1
Unknown	10.5

Note: The "unknown" category reflects beneficiaries who had hospice claims that indicate services provided in a nursing facility but for whom there were no nursing facility records for that day.

Source: MedPAC analysis of Medicare hospice claims, the Minimum Data Set, and denominator file.

providers.[15, 16] These anecdotal reports of questionable financial relationships between some hospices and nursing facilities echo some of the concerns raised by the Office of Inspector General (OIG) more than 15 years ago (Office of Inspector General 1997).

Nursing facilities and hospices have incentives to refer and admit certain beneficiaries to hospice because of financial incentives potentially accruing to both types of providers. Nursing facility residents tend to have diseases with longer end-of-life trajectories than patients in the community. Since, as discussed in previous sections, long stays in hospice are more profitable than short stays, nursing facilities may offer hospices a source of patients for whom current reimbursement levels are more profitable than average. Beyond the financial advantage of longer stays, hospices and nursing facilities may realize other efficiencies from joint provision of care. When a nursing facility resident enrolls in hospice, the nursing facility continues to provide room and board services (such as assistance with activities of daily living) to the patient, while the hospice provides core palliative services related to the patient's terminal illness.[17] Because the nursing facility and the hospice both have responsibility for aspects of the patient's care, the overlap can result in reduced workload for both entities. For example, when some of a resident's care is provided by the hospice—especially care provided by hospice-supplied home health aides—there may be a reduction of effort on the part of the nursing facility's staff, who otherwise would provide assistance with activities of daily living. Even though the Medicare conditions of participation require the hospice to be responsible for professional management of the patient's hospice services, the presence of the nursing facility's own nurses and aides on site may reduce the need for the hospice to provide the same amount of services as would be provided in the patient's home. For example, family caregivers may be less comfortable than facility staff in caring for patients with certain symptoms, which might result in hospices providing more nurse visits to patients at home than in a nursing facility. The hospice may also realize reduced staffing and transportation costs when serving nursing facility patients—for example, if a nurse or home health aide visits three beneficiaries in a single facility rather than traveling to three private homes.

In March 2009, the Commission recommended that OIG investigate several issues related to hospice care in nursing facilities, including the financial relationships between hospices and long-term care facilities, differences in patterns of nursing home referrals to hospice, and the appropriateness of enrollment and marketing practices. Since that time, OIG has completed two studies on hospice in nursing homes. In September 2009, OIG reported that the majority of claims for hospice patients in nursing facilities did not meet at least one of Medicare's requirements, with the most common issues being related to the plan of care or the content of the beneficiary's hospice election statement (Office of Inspector General 2009). In 2011, OIG found that hospices that relied heavily on nursing home patients were more likely to be for profit and to treat patients with conditions that typically have longer stays and require less complex care (Office of Inspector General 2011). OIG recommended that CMS (1) monitor hospices that rely heavily on nursing home patients and (2) reduce payment rates for hospice services provided in nursing homes. In making the second recommendation, OIG noted the overlap in hospices' provision of aide services and the facility's provision of aide services.

Clustering of hospice patients in nursing facilities

One factor that may contribute to the more favorable margins observed among hospices with more patients in nursing facilities stems from the treatment of patients in a centralized location. A centralized location may afford

EMBARGOED FOR RELEASE UNTIL 6:00PM JUNE 14, 2012

a hospice the opportunity to reduce staff time required for travel between patients as well as mileage costs. Also, hospices that focus on obtaining patients from certain facilities may incur lower costs in identifying prospective patients and potential referral sources.

To observe the degree to which hospice providers have patients clustered in individual nursing facilities, we matched Medicare hospice claims data to the nursing home Minimum Data Set to calculate the number of hospice patients an individual hospice provider had in a specific nursing facility on a single day. We estimate that at least 62 percent of days of hospice care furnished to nursing facility patients occurred in situations in which the hospice provider had three or more patients in the same facility on the same day (Table 5-9). Of that 62 percent, roughly 20 percent of days were in facilities where the provider had three or four patients, and about 42 percent of days were in facilities where the provider had five or more patients. This result confirms that hospice providers often have clusters of patients at individual facilities.

Hospice aide visits in nursing facilities

The provision of hospice aide visits in nursing facilities raises issues of duplicate payment. One role of nursing facilities is to assist patients with their personal care needs (e.g., activities of daily living). The nursing home room and board fees paid largely from Medicaid funds or by patients and families explicitly cover aide services provided by nursing facility staff to assist residents with their personal care needs.[18] In the absence of hospice, aide services are fully provided by facility staff. One question that could be explored is: Should the Medicare hospice benefit include aide services for patients residing in nursing facilities? Currently, aide visits by hospice staff account for one-third of the average labor cost of hospice visits in nursing facilities.

A different framework for considering the issue of payment for hospice care in nursing facilities is to compare the amount of aide visits provided in a nursing facility and at a patient's home. Our previous work shows that, counterintuitively, hospices provide more aide visits in nursing facilities than in patients' homes (Medicare Payment Advisory Commission 2011, Medicare Payment Advisory Commission 2010). In that work, we raised the question of whether the higher number of aide visits should be taken into account in payment rates for hospice services. Given that nursing facility patients have access to aide services through facility staff, it seems reasonable to expect that the amount of aide visits provided by hospice staff in nursing facilities be no higher than the amount provided in patients' homes. If hospices provided similar amounts of aide visits in the two settings, the average labor cost for all types of visits combined would be lower in nursing facilities than in patients' homes. This suggests that it could be appropriate to have a lower hospice payment rate in the nursing facility setting than in the home.

In the present analysis, we continue to observe that hospice staff provide more aide visits, but fewer nurse visits, to patients in nursing facilities than to patients at home (Table 5-10, p. 138).[19] For example, among patients who were in the second month of hospice care or beyond (days 31+ in Table 5-10), hospice aides averaged 2.5 visits per week to patients in nursing facilities compared with 1.8 visits per week to patients at home, a 43 percent difference in the number of aide visits per week provided by hospice staff in the two settings. In contrast, hospice nurses averaged fewer visits per week to patients in nursing facilities than to patients at home (Table 5-10).

The greater frequency of hospice aide visits in nursing facilities compared with patients' homes is reflected in estimates of the average labor cost of visits in the two settings. Because hospices provide more aide visits in nursing facilities than in the home, the average labor cost for all types of hospice visits combined appears slightly higher in nursing facilities than in patients' homes (with the exception of the last seven days of life) (Figure 5-5, p. 139). However, if hospice staff provided the same amount of aide visits to patients in the two settings, the average labor cost per day for all types of hospice visits combined would be lower in nursing facilities than in patients' homes. This is because hospice staff provide fewer nurse visits to patients in nursing facilities than to patients at home. For example, during days 15–30 of a hospice episode, the average labor cost of all types of visits combined is estimated to be $15.68 per day in patients' homes, compared with $16.01 per day in nursing facilities. If these nursing facility patients received the same amount of aide visits as patients at home, hospices' average labor cost per day for all types of visits combined would be $14.30 for patients in nursing facilities, about 9 percent less than for patients at home for days 15 to 30 of a hospice episode. Averaging across all episode days, we estimate that the average labor cost of visits per day would be between 4 percent and 7 percent lower in nursing facilities than in the home, assuming comparable levels of aide visits. These data suggest that one policy option that could be considered is a reduction of the

EMBARGOED FOR RELEASE UNTIL 10PM JUNE 6, 2013

TABLE 5–10 **Hospices provide more aide visits in nursing facilities than in patients' homes**

	Average number of hospice nurse visits per patient per week			Average number of hospice aide visits per patient per week		
Days of episode	Home	Nursing facility	Nursing facility visits as a percent of home visits	Home	Nursing facility	Nursing facility visits as a percent of home visits
1–7	3.0	2.9	98%	1.1	1.8	156%
8–14	2.0	1.8	91	1.6	2.4	151
15–30	1.8	1.7	92	1.6	2.5	151
31+	1.6	1.5	94	1.8	2.5	143
Last 7 days of life	4.2	3.7	87	2.0	2.3	117

Note: Data include only routine home care days for beneficiaries who were first admitted to hospice between May 1, 2010, and November 30, 2011, and were discharged by November 30, 2011. Data for the last seven days of life are excluded from all categories except the category labeled "last 7 days of life."

Source: MedPAC analysis of hospice claims and the common Medicare enrollment file from CMS.

hospice payment rate for beneficiaries in nursing facilities. Similar to the approach in our payment reform model, if we adjusted a portion (68 percent) of the hospice payment rate downward by between 4 percent and 7 percent to reflect lower resource use in nursing homes, it would yield a reduction of the total hospice payment rate in nursing facilities in the range of 3 percent to 5 percent.

Future research

This chapter has focused on improving the hospice payment system and enhancing the accountability of the benefit. These steps will help to improve payment equity across providers and temper the incentives for very long hospice stays. In addition to concerns about very long hospice stays, the Commission also has concerns about very short stays. One-quarter of Medicare hospice decedents receive hospice for five days or less, a phenomenon that has been unchanged over the past decade. Very short hospice stays raise concerns that some beneficiaries enter hospice too late to fully benefit from the services that hospice has to offer. Very short hospice stays are thought to stem largely from factors unrelated to the Medicare hospice payment system, such as some physicians' reluctance to have conversations about hospice or a tendency to delay such discussions until death is imminent, the difficulty some patients and families may have in accepting a terminal prognosis, and financial incentives in the fee-for-service system for increased volume of services (Medicare Payment Advisory Commission 2009).

In future research, the Commission may explore ways to improve the end-of-life care options available to beneficiaries. For example, we may explore options for providing more flexibility for concurrent hospice and conventional care. Currently, to enroll in hospice, beneficiaries must agree to forgo intensive conventional care for their terminal condition and related conditions. This requirement is thought to contribute to some beneficiaries waiting to enroll in hospice until the last few days of life. Some commercial insurers have begun experimenting with allowing concurrent hospice and conventional care, with one insurer reporting that concurrent care resulted in greater hospice enrollment, less use of intensive services, and lower costs (Krakauer et al. 2009). It is uncertain whether this type of approach would have the same effect in a Medicare fee-for-service environment, given an elderly population with a greater prevalence of noncancer diagnoses and the absence of health plan utilization management. PPACA mandates a three-year demonstration of concurrent care at 15 sites to test its effect on quality and cost; however, no funding was appropriated for the demonstration. In the future, the Commission may examine options related to concurrent care, such as considering whether there may be ways to provide flexibility for concurrent care through the Medicare Advantage program or through targeted fee-for-

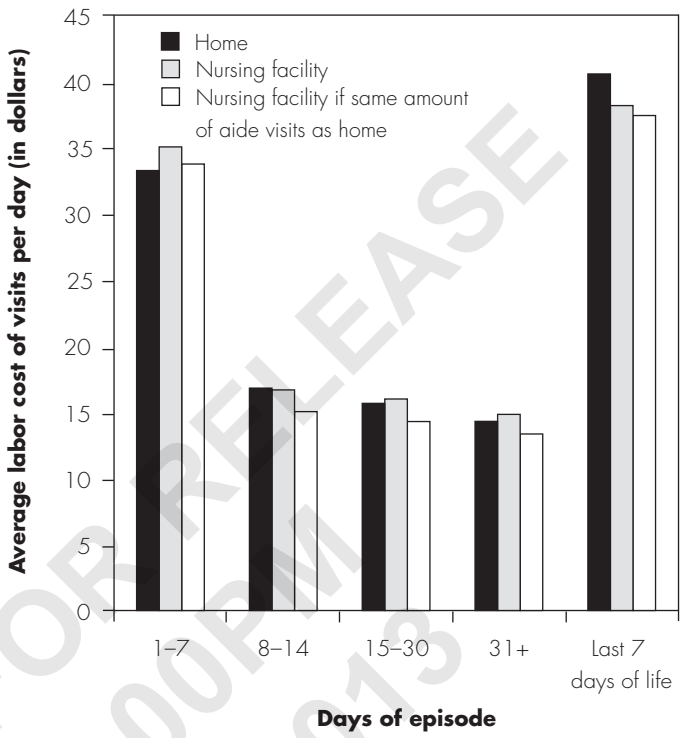
EMBARGOED FOR RELEASE UNTIL 1:00 PM JUNE 14, 2013

service demonstrations focused on specific conditions in which concurrent care is thought to have the best chance of not increasing spending.

Another approach that may have potential to improve end-of-life care is shared decision making. Shared decision making is a process by which a physician or other health care professional communicates to the patient personalized information about the potential outcomes, probabilities, and scientific uncertainties of available treatment options, and the patient communicates his or her preferences and the relative importance he or she places on the potential benefits and harms of the various options. Shared-decision-making tools may be helpful to patients with terminal illnesses because many physicians have difficulty having conversations about death and end-of-life care. As a result, patients do not always have a full understanding of their prognosis and options for care. Some private insurers have begun using shared-decision-making tools to help physicians and patients have conversations about advanced illnesses and improve the information patients receive about their condition and care options. These approaches have the potential to help ensure that patients receive care consistent with their preferences, which may improve end-of-life care for patients who choose hospice and for those who do not. In our continued work on shared decision making, we may explore efforts by the medical community and commercial insurers to develop and implement shared-decision-making tools for patients with advanced illnesses. ■

FIGURE 5–5

Average labor cost of routine home care visits per day by setting



Note: Data reflect labor cost for the six types of visits (from nurses; aides; social workers; and physical, occupational, and speech therapists) and social worker phone calls. The data include only those beneficiaries who were first admitted to hospice between May 1, 2010, and November 30, 2011, and were discharged by November 30, 2011. The underlying data include only days when the patient received routine home care and the location of care was the home or a nursing facility. Data for the last 7 days of life are excluded from all bars except the ones labeled "last 7 days of life."

Source: MedPAC analysis of hospice claims and the common Medicare enrollment file from CMS and the wage rates and benefits from the Occupational Employment Statistics and the Employer Cost for Employee Compensation from the Bureau of Labor Statistics.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 10, 2013

Endnotes

1 Under the Medicare hospice benefit, there are four types of care: routine home care, continuous home care, general inpatient care, and inpatient respite care. Routine home care, which can be provided in a variety of settings—including the patient's home, a nursing facility, an assisted living facility, and other types of facilities—makes up more than 97 percent of hospice days. There is a flat payment per day of about $153 for routine home care regardless of whether any visit is provided on a day.

2 Patients who received routine home care for a portion of their hospice stay and another level of care for the other portion of their stay were included in the analysis on the days they received routine home care, which allowed us to include in our analysis all days that were paid at the routine home care level of care.

3 Hospices also report physicians' visits. We did not include physicians' visits in our analysis because Medicare pays for them separately, outside the payment for routine home care.

4 A hospice is permitted to report social workers' phone calls on the claim if the call involves counseling the patient or family or is for the purpose of arranging care.

5 Our model treats all hospice days as one episode, regardless of whether a patient is discharged alive from hospice and returns to hospice or whether the patient moves from one level of hospice care to another. In implementing a U-shaped payment model for routine home care, an issue that would need to be considered is what payment rate is appropriate when a patient reenters hospice after a live discharge or moves from a higher level of care to routine home care. In considering this issue, it would be important to avoid creating financial incentives for providers to discharge and readmit patients or to move patients between levels of care for any reason other than clinical appropriateness.

6 As under current policy, payments would continue to be adjusted for geographic differences in wages.

7 The add-on payment for the last seven days of life is added to the payment rate that would otherwise apply for those days if they were not the last seven days. For example, if a beneficiary who received routine home care was discharged deceased with a length of stay of 21 days, Medicare would pay about $268 per day ($148 + $120) for days 15–21 because they were the last 7 days of life.

8 The Medicare aggregate cap limits the total payments an individual hospice can receive in a year. Under the cap, if a hospice's total Medicare payments exceed its total number of Medicare beneficiaries served multiplied by the cap amount ($25,377.01 in 2012), it is required to repay the excess to Medicare.

9 These aggregate spending figures do not take into account the return of cap overpayments by above-cap providers. At the time of publication, the 2011 cap overpayment amounts were not finalized by the Medicare contractors. The Commission estimated that 2010 cap overpayments were less than $150 million. Medicare's ability to fully collect these overpayments is uncertain, especially if a provider closes.

10 The nearly $8 billion estimate reflects 2011 hospice spending for patients whose stays exceeded 180 days by the end of 2011 or by the time of discharge if hospice care ceased before the end of 2011. Some patients whose stays were less than 180 days as of the end of 2011 continue to receive hospice in future years and eventually exceed 180 days of hospice care. The 2011 spending for those beneficiaries is not included in the $8 billion figure.

11 Medicare pays hospice providers a daily rate to cover all care related to the terminal condition. If a beneficiary needs care that is unrelated to the terminal condition, traditional Medicare covers the service. The hospice is responsible for all services related to the terminal condition that are in the beneficiary's plan of care; if the beneficiary pursues care related to the terminal condition that is not in the plan of care, the beneficiary may be liable for the cost. In particular, a plan of care typically does not include emergency services, consistent with the hospice emphasis on comfort over cure. Hospice has a role to educate patients and families about what to expect as death nears and provide a clear plan and information on who to call and what to do in the event of an exacerbation or crisis. If a patient or family member deviates from the plan of care to call an ambulance rather than a hospice contact, because of alarm or other factors, or pursues other emergency services not in the plan of care, in some cases the hospice may not cover services, leading the patient or family to revoke hospice rather than bear the cost.

We looked at beneficiaries who had an emergency room visit or inpatient stay on the day of or after discharge as a proxy for these services being the reason for discharge. We found that 27 percent of all beneficiaries discharged alive in 2010 had an emergency room visit or inpatient stay on the day of or after their first discharge. Use of this conventional care at discharge was associated with a quick return to hospice: 46 percent of those who had either service returned to hospice or died within seven days.

12 Effective July 1, 2012, CMS promulgated specific codes that hospices must use to specify the reason for live discharge from hospice. These codes may help separate live discharges

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

due to the beneficiary revoking the hospice benefit (because of beneficiary or family choice, pursuing services not in the plan of care, quality of care, etc.) from hospice-initiated discharges because the beneficiary's condition is no longer considered terminal or for other reasons.

13 Hospice episodes in 2010 were followed through April 2012.

14 The $156 amount represents the average per diem payment rate across all levels of care for beneficiaries in 2010. Other sections in this chapter cite a daily payment rate of $153, representing the per diem rate for routine care in hospice in 2013.

15 Nursing homes have the capacity to steer patients to particular hospice providers in part because a hospice must have a written agreement with a nursing facility before providing hospice services to any of the facility's residents. While the hospice is paid for hospice services by Medicare, the hospice must have a written agreement with the nursing facility that stipulates a number of issues, including what services the hospice is responsible for, the mode of communication between the organizations, and any hospice services the hospice provider will contract with the nursing facility to provide.

In addition, for patients who are dually eligible for Medicare and Medicaid, when a patient residing in a nursing facility elects hospice, most states pay the Medicaid nursing facility room and board payment to the hospice, which is then responsible for paying the nursing facility for room and board. The amount that the hospice agrees to pay the nursing facility for room and board for dual eligibles is also part of the written agreement between the two providers.

16 For example, we have heard anecdotal reports from industry sources that some nursing facilities request that hospice staff provide a certain amount of aide services in the nursing facility as a condition of referring patients to the hospice.

17 Room and board services include personal care services, assistance in activities of daily living, socializing activities, administration of medication, maintaining the cleanliness of a resident's room, and supervising and assisting in the use of durable medical equipment and prescribed therapies. Core palliative hospice services include nursing care, physician care, counseling, and medical social services related to the diagnosed terminal illness.

18 When a beneficiary dually eligible for Medicare and Medicaid in a nursing facility elects hospice, most state Medicaid programs pay the Medicaid room and board payment to the hospice, which is then responsible for paying the nursing facility the room and board payment. Under Medicaid, states are permitted to pay no less than 95 percent of the standard room and board rate to the hospice.

19 This analysis focuses on the number of visits provided by hospice staff. The length of hospice visits also varies across the two settings. Nursing facility patients typically receive slightly shorter visits (about 5 percent fewer minutes per visit) from hospice aides and hospice nurses than patients at home. An exception to this is the first week of the episode (when hospice nurses provide slightly longer visits in nursing facilities than in patients' homes) and the last seven days of life (when hospice nurses and aides provide similar visit lengths in the two settings).

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

References

Johnson, K. S., M. Kuchibhatla, D. Tanis, et al. 2008. Racial differences in hospice revocation to pursue aggressive care. *Archives of Internal Medicine* 168, no. 2 (January 28): 218–224.

Kelley, A. S., P. Deb, Q. Du, et al. 2013. Hospice enrollment saves money for Medicare and improves care quality across a number of different lengths-of-stay. *Health Affairs* 32, no. 3 (March): 552–561.

Krakauer, R., C. M. Spettell, L. Reisman, et al. 2009. Opportunities to improve the quality of care for advanced illness. *Health Affairs* 28, no. 5 (September–October): 1357–1359.

Kutner, J. S., S. A. Meyer, B. L. Beaty, et al. 2004. Outcomes and characteristics of patients discharged alive from hospice. *Journal of the American Geriatric Society* 52, no. 8 (August): 1337–1342.

Medicare Payment Advisory Commission. 2013a. *Online appendixes: Hospice services.* Washington, DC: MedPAC. http://medpac.gov/chapters/Mar13_Ch12_APPENDIX.pdf.

Medicare Payment Advisory Commission. 2013b. *Report to the Congress: Medicare payment policy*. Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2011. *Online appendixes: Hospice.* Washington, DC: MedPAC. http://medpac.gov/chapters/Mar11_Ch11_APPENDIX.pdf.

Medicare Payment Advisory Commission. 2010. *Online appendixes: Hospice.* Washington, DC: MedPAC. http://medpac.gov/chapters/Mar10_Ch02E_APPENDIX.pdf.

Medicare Payment Advisory Commission. 2009. *Report to the Congress: Medicare payment policy.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2008. *Report to the Congress: Reforming the delivery system.* Washington, DC: MedPAC.

Office of Inspector General, Department of Health and Human Services. 2011. *Medicare hospices that focus on nursing facility residents.* OEI–02–10–00070. Washington, DC: OIG.

Office of Inspector General, Department of Health and Human Services. 2009. *Hospice care for beneficiaries in nursing facilities: compliance with Medicare coverage requirements.* OEI–02–06–00221. Washington, DC: OIG.

Office of Inspector General, Department of Health and Human Services. 1997. *Hospice and nursing home contractual relationships.* OEI–05–95–0025. Washington, DC: OIG.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

CHAPTER 6

Care needs for dual-eligible beneficiaries

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

CHAPTER 6

Care needs for dual-eligible beneficiaries

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Chapter summary

Dual-eligible beneficiaries are eligible for both Medicare and Medicaid benefits. In 2011, about 19 percent of Medicare beneficiaries (about 10 million) were dual eligible. The dual-eligible population is diverse and includes individuals with multiple chronic conditions; difficulties with activities of daily living; cognitive impairments such as dementia; individuals with physical disabilities, developmental disabilities, and severe mental illness; and some individuals who are relatively healthy but have a low income. Because of their diverse needs, dual-eligible beneficiaries require a mix of medical care, long-term care, behavioral health services, and social services. Given the challenges this population faces in accessing services through two payment and delivery systems, programs that coordinate dual-eligible beneficiaries' Medicare and Medicaid benefits (which we refer to as Medicare–Medicaid coordination programs) have the potential to improve dual-eligible beneficiaries' access to services and quality of care. This chapter reviews pathways to dual eligibility, updated Medicare and Medicaid spending on dual-eligible beneficiaries for 2009, and care coordination best practices from Medicare–Medicaid coordination programs.

- ***Pathways to eligibility*—**Dual-eligible beneficiaries age 65 or older obtain Medicare eligibility due to age and receipt of Social Security benefits. They may have income and assets low enough to qualify for Medicaid when they enter the Medicare program or they may obtain Medicaid

In this chapter

- Introduction
- Overview of dual-eligible beneficiaries
- Medicare and Medicaid spending on dual-eligible beneficiaries
- Care delivery systems for dual-eligible beneficiaries

eligibility (and dual-eligible status) after spending down their income and assets on medical expenses. Dual-eligible beneficiaries under the age of 65 obtain Medicare eligibility through disability (a physical disability, developmental disability, end-stage renal disease (ESRD), or disabling mental health condition), generally through the Social Security Disability Insurance (SSDI) program. Beneficiaries on SSDI can become dually eligible if their income and assets qualify them for Supplemental Security Income in their state.

- ***Medicare and Medicaid spending—***Close to 6 million dual-eligible beneficiaries (excluding beneficiaries enrolled in Medicare Advantage plans and those with ESRD) who were enrolled in Medicare fee-for-service (FFS) in 2009 met the inclusion criteria from our analysis. These beneficiaries collectively accounted for almost $93 billion in Medicare FFS and Part D spending. Dual-eligible beneficiaries age 65 or older accounted for almost two-thirds of this spending and had higher average per capita spending than dual-eligible beneficiaries under the age of 65. In 2009, Medicaid FFS and managed care spending on dual-eligible beneficiaries totaled $80 billion, while combined Medicare and Medicaid spending for these beneficiaries was approximately $173 billion. Medicare accounted for just over half of the combined spending for both the older and the younger dual-eligible populations. Total federal spending on dual-eligible beneficiaries—Medicare spending and the federal portion of Medicaid spending on dual-eligible beneficiaries—is higher than state spending.

- ***Long-term care services and supports—***Medicaid-covered long-term care services and supports (LTSS) can be provided in institutions or in the community. In 2009, slightly more than one-third of Medicare FFS dual-eligible beneficiaries utilized Medicaid-covered LTSS services (excluding beneficiaries with ESRD). Medicaid spending per capita was much higher for LTSS users ($35,031) than for non-LTSS users ($2,374). Medicare accounted for 40 percent of combined spending for LTSS users and 83 percent of combined spending for non-LTSS users. For LTSS users both over and under the age of 65, Medicaid LTSS spending per capita was more than twice as high for institutional LTSS services compared to community-based LTSS services.

- ***Severe and persistent mental illness—***We defined severe and persistent mental illness (SPMI) as the presence of schizophrenia, schizoaffective disorder, bipolar disorder, major depressive disorder, or paranoid disorder. In 2009, 20 percent of all dual-eligible beneficiaries enrolled in FFS during the entire year (excluding beneficiaries with ESRD) had at least one SPMI condition. Almost one-third of dual-eligible beneficiaries under the age of 65 had an SPMI

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

condition, compared with 10 percent of dual-eligible beneficiaries age 65 or older. Two-thirds of SPMI beneficiaries age 65 or older utilized LTSS services in 2009, while less than one-quarter of the younger dual-eligible population with SPMI were LTSS users. Average Medicare and Medicaid spending per capita was higher for SPMI dual-eligible beneficiaries age 65 or older than for those under the age of 65.

- ***Care delivery systems for dual-eligible beneficiaries—***We conducted structured interviews with stakeholders (federally qualified health centers (FQHCs) and community health centers (CHCs), primary care physicians, health systems, behavioral health providers, aging services organizations, community-based care managers, beneficiary advocates, and health plans) in five states with Medicare–Medicaid coordination programs. Dual-eligible beneficiaries (both those enrolled in Medicare–Medicaid coordination programs and those not enrolled in those programs) were consistently reported to need high-contact, on-the-ground, intensive care management given that their issues are not likely to be resolved in a few physician visits. Dual-eligible beneficiaries' providers tend to operate only in their respective settings and communication with one another across settings regarding a patient's care is not common. Medicare–Medicaid coordination programs focus on getting providers in various settings—for example, hospitals, physicians' offices, and social service agencies, among others—to communicate with one another regarding a beneficiary's care. These programs also seek to leverage community-based resources, including care coordination activities at FQHCs and CHCs. Many FQHCs and CHCs are uniquely positioned to coordinate care for dual-eligible beneficiaries because they provide primary care, behavioral health services, and care management services, often at the same clinic site. ■

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

Introduction

Dual-eligible beneficiaries are eligible for both Medicare and Medicaid benefits. In 2011, about 19 percent of Medicare beneficiaries (about 10 million) were dual eligible.[1] The dual-eligible population is diverse and includes individuals with multiple chronic conditions; difficulties with activities of daily living; cognitive impairments such as dementia; individuals with physical disabilities, developmental disabilities, and severe mental illness; and some individuals who are relatively healthy. Because of their diverse needs, dual-eligible beneficiaries require a mix of medical care, long-term care, behavioral health services, and social services. Dual-eligible beneficiaries also have fewer financial resources than the general Medicare population. In 2006, more than half of dual-eligible beneficiaries had incomes below the poverty line, compared with 8 percent of non–dual-eligible Medicare beneficiaries (Medicare Payment Advisory Commission 2010).

Given the challenges this population faces in accessing services through two payment and delivery systems, programs that coordinate dual-eligible beneficiaries' Medicare and Medicaid benefits (which we refer to as Medicare–Medicaid coordination programs) have the potential to improve dual-eligible beneficiaries' access to services and quality of care. Current Medicare–Medicaid coordination programs are either capitated managed care programs, in which both Medicare and Medicaid services are capitated, or they are Medicaid programs in which Medicare services are provided through Medicare fee-for-service (FFS). The capitated programs are operated by health plans, which are financially at risk for the Medicare and Medicaid services they furnish.[2] The Medicare–Medicaid coordination programs that operate under Medicare FFS generally adopt a medical home approach. These coordination programs receive a per member per month fee from Medicare or Medicaid to coordinate beneficiaries' Medicare and Medicaid benefits, but Medicare services are still paid through FFS.

In general, there are small numbers of Medicare–Medicaid coordination programs, and enrollment in these programs tends to be low (Medicare Payment Advisory Commission 2010). Most dual-eligible beneficiaries are enrolled in traditional FFS Medicare or Medicare Advantage (MA) plans that do not coordinate their Medicaid benefits. This chapter reviews the pathways to dual eligibility, updated Medicare and Medicaid spending on dual-eligible beneficiaries for 2009, and care coordination best practices from Medicare–Medicaid coordination programs.

Overview of dual-eligible beneficiaries

There are different pathways to becoming a dual-eligible beneficiary. Partly because of this fact, dual-eligible beneficiaries are not a homogeneous group. Individuals 65 years or older qualify for Medicare on the basis of age and receipt of Social Security benefits.[3] Medicaid, by contrast, is a program for people with limited income and assets. Medicare beneficiaries 65 or older can be eligible for Medicaid and become dual-eligible beneficiaries if they meet their state's Medicaid income and asset criteria. For individuals under age 65, Medicare entitlement is based on disability. Workers under the age of 65 who have paid into Social Security and become disabled can qualify for Social Security Disability Insurance (SSDI). SSDI beneficiaries qualify for Medicare benefits after 24 months of Social Security status as a disabled person.[4] If SSDI beneficiaries also have incomes that are low enough to qualify for Supplemental Security Income (SSI) payments, they also qualify for Medicaid benefits in most states (Woodcock et al. 2011).[5] SSDI beneficiaries may have a physical disability, an intellectual or developmental disability, or a mental health condition. In some states, Medicare beneficiaries in either age group may also qualify for Medicaid through medically needy eligibility by "spending down" income and assets, generally during a nursing home stay. These individuals are Medicare beneficiaries who do not initially meet the Medicaid income and assets requirements but incur medical expenses that reduce their income and assets to the level that qualifies for a state's medically needy program.

Full-benefit and partial-benefit dual-eligible beneficiaries

Dual-eligible beneficiaries (both those age 65 or older and those under age 65) can be full-benefit dual-eligible beneficiaries or partial-benefit dual-eligible beneficiaries. Full-benefit dual-eligible beneficiaries receive all the services that Medicaid covers in their state (including long-term care) as well as assistance with their Medicare premiums and other cost sharing. (For a complete list of mandatory and optional Medicaid benefits, see online Appendix 6-A to this chapter at http://www.medpac.gov).

Partial-benefit dual-eligible beneficiaries qualify for Medicaid coverage through the Medicare Savings Program (MSP) (Table 6-1, p. 150). Partial-benefit dual-eligible beneficiaries have limited incomes and assets, but their income and assets are not low enough to qualify them for full Medicaid benefits in their state. These dual-eligible

EMBARGOED FOR RELEASE UNTIL 6:00PM JUNE 14, 2013

TABLE 6–1 **Medicare Savings Program**

Medicare Savings Program	Eligibility requirements	Cost-sharing assistance	Funding
Qualified Medicare beneficiaries (QMB)	• Income < 100% FPL • Resources do not exceed SSI limit	Payment of Medicare Part A and Part B: • Premiums • Deductibles • Coinsurance • Copayment Eligible for Part D LIS	Payment comes from the state's Medicaid program funds and is eligible for federal match.
Specified low-income Medicare beneficiaries (SLMB)	• Income > 100% FPL, but <120% • Resources do not exceed SSI limit	Payment of: • Medicare Part B premiums Eligible for Part D LIS	Payment comes from the state's Medicaid program funds and is eligible for federal match.
Qualified individuals	• Income > 120% FPL, but <135% • Resources do not exceed SSI limit	Payment of: • Medicare Part B premiums Eligible for Part D LIS	Expenditures are100% federally funded and total expenditures are limited by statute.
Qualified disabled and working individuals	• Those who lost Medicare Part A benefits due to returning to work • Income < 200% FPL • Resources do not exceed SSI limit	Payment of: • Medicare Part A premiums	Payment comes from the state's Medicaid program funds and is eligible for federal match.

Note: FPL (federal poverty limit), (SSI) supplemental security income, LIS (low-income subsidy). Two categories of QMBs and SLMBs—QMB plus and SLMB plus—are eligible for full Medicaid benefits in addition to cost-sharing assistance. Other dual-eligible beneficiaries qualify for full Medicaid benefits but do not qualify through the Medicare Savings Program.

Source: Centers for Medicare & Medicaid Services 2012.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

beneficiaries are eligible for assistance only with their Medicare premiums or other cost sharing. There are four categories of partial-benefit dual-eligible beneficiaries in the MSP program: qualified Medicare beneficiaries, specified low-income Medicare beneficiaries, qualified individuals, and qualified disabled and working individuals. Qualified Medicare beneficiaries are eligible for Medicaid assistance for their entire Medicare cost sharing (Part A premium, Part B premium, deductibles, and coinsurance) and are eligible for the low-income subsidy in Part D, Medicare's prescription drug program. The other categories of partial-benefit dual-eligible beneficiaries are eligible for assistance with only some of their Medicare cost sharing, and they are also eligible for the low-income subsidy (see Table 6-A1 in the online appendix to this chapter, available at http://www.medpac.gov, for a more detailed description of MSP categories).[6]

Beneficiary demographics

According to 2011 data for the FFS Medicare population, dual-eligible beneficiaries were more likely than other beneficiaries to belong to racial and ethnic minority groups. However, Whites still constituted the majority of both dual-eligible beneficiaries and non–dual-eligible beneficiaries. Of the beneficiaries enrolled in FFS Medicare, about 58 percent of dual-eligible beneficiaries were White compared with 84 percent of non–dual eligibles.[7] At 19 percent of the dual-eligible population, African Americans accounted for the second largest racial or ethnic group of dual-eligible beneficiaries. In contrast, African Americans accounted for 8 percent of the non–dual-eligible population. Hispanics accounted for the third largest racial or ethnic group of dual-eligible beneficiaries, constituting 14 percent of dual-eligible beneficiaries. About 4.5 percent of the non–dual-eligible FFS population was Hispanic.

Medicare and Medicaid benefits for dual-eligible beneficiaries

Medicare is the primary payer for dual-eligible beneficiaries. These beneficiaries are eligible for the same Medicare benefits as other Medicare beneficiaries.

For Medicaid, there are certain services that states must cover for dual-eligible beneficiaries, including nursing home care, Medicare cost sharing, coverage for inpatient hospital and nursing facility services when Part A coverage is exhausted, and nonskilled home health care (see Table 6-A2 in the online appendix to this chapter, available at http://www.medpac.gov). States have the option to cover other services—such as dental, vision, hearing, and transportation to medical appointments. In general, Medicare coverage lacks social support services, such as transportation to and from medical appointments. Since the Medicare benefit is limited in this way, Medicaid provides services that wrap around Medicare's acute care benefit. There is considerable variation across states in the services covered, resulting in different benefits for dual-eligible beneficiaries depending on where they live.

Medicaid is a joint federal- and state-funded program. The costs of Medicaid services are shared between the federal government and states, with the states receiving federal matching funds (also known as federal medical assistance percentage). The amount of the federal match a state can receive is based on each state's per capita income, but the federal government pays at least half the cost of Medicaid services. States with the lowest level of per capita income receive the highest levels of federal matching funds.

Long-term care services and supports

Long-term care services and supports (LTSS) are supportive services for individuals with limited capacity for self-care (O'Shaughnessy 2013). Medicaid covers a broad range of LTSS that are provided in institutions or in the community. Institutional LTSS include services provided in nursing facilities, intermediate care facilities for people with developmental disabilities, inpatient psychiatric services for individuals under age 21, and services for individuals age 65 or older in an institution for mental illnesses (Centers for Medicare & Medicaid Services 2013). Community-based LTSS may include home health and personal care services, along with a variety of other services that vary by state. Community-based LTSS offer beneficiaries the option to receive services in their own home or community and serve a variety of populations, including those with mental illness, intellectual disabilities, and physical disabilities.

States are required to include some LTSS in their state plan (a document that specifies the scope of the state's Medicaid program). States may also offer LTSS through the home- and community-based services (HCBS) waiver programs. HCBS waiver programs can offer a broader array of LTSS than those covered under a state plan, and they can be limited to specific groups of dual-eligible beneficiaries (such as the intellectually and developmentally disabled). Many states focus on rebalancing their long-term care system by trying to offer LTSS in the home or community rather than in an institutional setting.

Behavioral health services

Behavioral health services consist of mental health and substance abuse services. For behavioral health services, Medicare currently covers reasonable and necessary partial hospitalizations and traditional outpatient and inpatient visits to behavioral health providers (Bella 2012). Although federal law does not contain explicit provisions for which types of behavioral health services can be provided, all state Medicaid programs offer some mental health and substance abuse services. Compared with Medicare, Medicaid programs can cover a broader range of behavioral health services, which can include social work; personal care; rehabilitation and preventive services; clinic services (such as in a community mental health center); and targeted case management intended to help beneficiaries access social, medical, educational, and other services (Shirk 2008).

Outcomes of Medicare–Medicaid coordination programs

The literature generally suggests that Medicare–Medicaid coordination programs for dual-eligible beneficiaries can reduce hospital and nursing home utilization and health care expenditures. Most of the evidence on Medicare–Medicaid coordination programs is specific to the Program of All-Inclusive Care for the Elderly (PACE)—a capitated, provider-based Medicare–Medicaid coordination program (Medicare Payment Advisory Commission 2012). A number of evaluations and research studies show that beneficiaries enrolled in PACE had fewer hospitalizations and nursing home admissions and a lower mortality rate than similar beneficiaries who were not enrolled in PACE. In one CMS-sponsored evaluation, the study group consisted of beneficiaries who enrolled at 11 PACE sites, and the comparison group consisted of beneficiaries who expressed interest in joining one of these PACE sites, had a home visit conducted by PACE staff, and decided not to enroll in the program (Chatterji et al. 1998). PACE enrollees in this study were 50 percent less likely than comparison group members to have had 1 or more hospital admissions at the 6-month follow-up and 40 percent less likely at the 12-month follow-up. They also had fewer

EMBARGOED FOR RELEASE UNTIL 11:00 PM JUNE 14, 2013

hospital days than the comparison group. At the 6-month follow-up, the mean number of hospital days for PACE enrollees was 1.9 days, compared with 6.1 days for the comparison group. At 12 months, PACE enrollees averaged 3 fewer days in the hospital than comparison group members. Nursing home use was also lower for PACE enrollees at 6 months and 12 months after baseline. At the six-month follow-up, 30 percent of comparison group members had one or more admissions to a nursing home compared with 10 percent for PACE enrollees. At the 12-month follow-up, PACE enrollees were 52 percent less likely than comparison group members to have had a nursing home stay.

PACE enrollees also had better self-reported health status and quality of life and a lower mortality rate than the comparison group. At six months after baseline, 43 percent of PACE enrollees reported being in good or excellent health, compared with 37 percent of the comparison group, and 72 percent of PACE enrollees reported their lives were "pretty satisfying," compared with 55 percent of the comparison group. Mortality was also lower among the PACE enrollees. Over the 2.5-year observation period, 19 percent of PACE enrollees died, compared with 25 percent of the comparison group. Regression results estimated a median life expectancy of 5.2 years for PACE enrollees and 3.9 years for comparison group members.

Another evaluation found that PACE enrollees in one state had a lower risk of dying and greater stability in physical functioning than Medicaid beneficiaries receiving HCBS services in that state. However, the state spent more on PACE enrollees than on HCBS enrollees. This difference may have been because the PACE enrollees had similar acuity to the HCBS population but the state payment rates for PACE were higher than for the HCBS program (Mancuso et al. 2005). Another study compared five-year survival rates for enrollees in PACE with enrollees in a HCBS program and beneficiaries residing in nursing homes (Wieland et al. 2010). The study found that the median survival rate was longest for PACE enrollees at 4.2 years, compared with 3.5 years for enrollees in the waiver program and 2.3 years for beneficiaries in nursing homes.

Savings from Medicare–Medicaid coordination programs and LTSS rebalancing

Lower utilization and health care costs do not necessarily result in savings to the Medicare and Medicaid programs. Payment to the plans operating Medicare–Medicaid coordination programs, including PACE providers, are based on the same capitated system under which all MA plans are paid. Whether Medicare–Medicaid coordination programs reduce Medicare spending depends on how the capitation rates compare with FFS spending. Medicare currently spends more on beneficiaries who enroll in MA plans than the program would have spent had the beneficiaries remained in FFS. Although payments to MA plans in aggregate are projected to be closer to FFS spending levels in 2013 than they were in 2012, they are still projected to be 4 percent higher than FFS spending in 2013 (Medicare Payment Advisory Commission 2013).

Savings to the Medicaid program might accrue through rebalancing Medicaid LTSS. Rebalancing refers to increasing the proportion of LTSS provided through HCBS while reducing the proportion furnished in institutions. Rebalancing efforts can occur through Medicare–Medicaid coordination programs or through state initiatives that are independent of coordination with Medicare. The evidence of Medicaid savings due to rebalancing is limited and study findings are mixed. An Agency for Healthcare Research and Quality (AHRQ) review of the literature on this topic from 1995 to 2012 found insufficient evidence to compare costs of HCBS and nursing home services (Wysocki et al. 2012). AHRQ considered the evidence to be insufficient because the studies accounted for Medicaid spending on nursing home services but did not account for total Medicaid spending or Medicaid beneficiaries' out-of-pocket spending. The literature review also found that HCBS can reduce Medicaid spending on a per user basis by avoiding a more costly nursing home stay; however, total Medicaid spending might not be reduced if nursing home beds continue to be filled by other Medicaid beneficiaries.

Another systematic review concluded that evaluations of Medicaid HCBS waivers were weak (Grabowski 2006). One study discussed in the review—a 1994 Government Accountability Office (GAO) study of Oregon, Washington, and Wisconsin—compared unadjusted per capita expenditures for Medicaid beneficiaries in nursing homes and those in HCBS waivers (Government Accountability Office 1995). GAO found that average Medicaid expenditures per capita were higher for Medicaid beneficiaries in nursing homes than for those receiving HCBS waiver services. However, Grabowski (2006) noted that this study did not assess aggregate Medicaid spending, thus limiting its findings. The GAO study also found that the number of nursing home beds in the three states examined decreased slightly

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

between 1982 and 1993, while the number of nursing home beds increased nationally by 20 percent over the same period. Another study analyzed whether growth in HCBS Medicaid spending was associated with overall Medicaid savings in Colorado, Oregon, and Washington by comparing projected and actual Medicaid long-term care costs (Alecxih et al. 1996). The study estimated that HCBS spending resulted in overall Medicaid savings in each state. However, Grabowski noted that not all confounding factors were controlled for in this study. Most notably, these states had other nursing home diversion policies in place.

A more recent study developed a statistical model using Medicaid data between 1995 and 2009 from almost every state to assess the effect of rebalancing on overall Medicaid LTSS expenditures (Kaye 2012). The research found that shifting LTSS spending toward HCBS has a nonlinear effect on Medicaid LTSS spending. Gradual rebalancing—defined as shifting about 2 percentage points of LTSS spending toward HCBS each year—can reduce overall Medicaid LTSS spending by an estimated 15 percent over 10 years. However, the effects of faster rebalancing are not consistent. Rapid rebalancing can reduce Medicaid LTSS spending if funds are shifted toward waiver programs. Alternatively, it can have no effect on spending if rebalancing efforts favor personal care services.

Medicare and Medicaid spending on dual-eligible beneficiaries

The following results are based on a quantitative analysis of combined Medicare and Medicaid data for dual-eligible beneficiaries. We analyzed Medicare and Medicaid spending for beneficiaries who were enrolled in Medicare FFS Part A and Part B every month they were eligible for Medicare in 2009. This definition includes beneficiaries who were not eligible for Medicare for the entire year and beneficiaries who died during the year. From this population, we divided beneficiaries into dual-eligible and non–dual-eligible beneficiaries. We defined dual-eligible beneficiaries as having dual-eligible status the entire time they were enrolled in Medicare in 2009; non–dual-eligible beneficiaries never had dual-eligible status.[8] Of all beneficiaries enrolled in FFS Medicare in 2009, about 11 percent of beneficiaries with any dual eligibility during the year were both dual eligible and non–dual eligible during the year, and about 1 percent were both Medicaid only and dual eligible. These groups were excluded from the analyses presented in Table 6-2 through Table 6-6 but were included in the analysis of beneficiaries with severe and persistent mental illness (SPMI) (Table 6-7). Other groups excluded from Table 6-2 through Table 6-7 are beneficiaries who were enrolled in an MA plan during the entire year, beneficiaries who were enrolled in both Medicare FFS and an MA plan during the year, beneficiaries with end-stage renal disease (ESRD), beneficiaries enrolled only in Medicare Part A, and beneficiaries enrolled only in Medicare Part B.

In 2009, close to 6 million dual-eligible beneficiaries (excluding ESRD beneficiaries) were enrolled in Medicare FFS and met the inclusion criteria for our analysis (Table 6-2, p. 154). Most dual-eligible beneficiaries (58 percent) were age 65 or older and about 42 percent were under age 65. A little more than three-quarters (76 percent) of dual-eligible beneficiaries were full-benefit dual eligibles and 20 percent were partial-benefit dual eligibles. About 4 percent of dual-eligible beneficiaries in this sample were both full-benefit and partial-benefit dual eligibles during the year. These beneficiaries are included in the analysis, but results for them are not displayed separately.

In 2009, Medicare spent close to $93 billion on FFS and Part D benefits for dual-eligible beneficiaries enrolled in FFS. Dual-eligible beneficiaries age 65 or older accounted for more spending than younger dual-eligible beneficiaries. The dual-eligible beneficiaries age 65 or older accounted for almost two-thirds (62 percent) of Medicare spending on dual-eligible beneficiaries. Per capita spending was also higher for these beneficiaries ($16,878) compared with younger dual-eligible beneficiaries ($14,183). In 2009, full-benefit beneficiaries accounted for almost 80 percent of Medicare spending on the dual-eligible population, while partial-benefit beneficiaries accounted for 15 percent. Those who were both full-benefit and partial-benefit beneficiaries during the year accounted for the remainder of spending (6 percent) (data not shown).

In 2009, Medicare FFS and Part D spending on non–dual-eligible Medicare beneficiaries was close to $200 billion, more than twice the amount spent on dual-eligible beneficiaries in that year. However, per capita spending on dual-eligible beneficiaries in FFS ($15,743) was almost twice the per capita spending on non–dual-eligible Medicare beneficiaries ($8,081).

EMBARGOED FOR RELEASE UNTIL 11:00AM JUNE 14, 2013

TABLE 6–2 **Medicare spending for beneficiaries enrolled in Medicare FFS, 2009**

Category of beneficiary	Number of beneficiaries (in millions)	Percent of dual eligibles	Medicare spending, FFS and Part D (in billions)	Percent of Medicare spending for dual eligibles	Per capita spending
All dual eligibles	5.9	100%	$92.9	100%	$15,743
Age 65 or older	3.4	58	57.6	62	16,878
Under age 65	2.5	42	35.3	38	14,183
Full benefit*	4.5	76	73.1	79	16,371
Partial benefit*	1.2	20	14.4	15	12,215
Non–dual-eligible Medicare beneficiaries	24.6	0	199.0	0	8,081

Note: FFS (fee-for-service). Data exclude end-stage renal disease beneficiaries. The per capita spending amounts in the table were calculated using nonrounded numbers and therefore may not exactly match per capita spending calculations using the Medicare spending and number of beneficiaries in the table.
*"Full benefit" and "partial benefit" do not sum to 100 percent because 4 percent of the dual eligibles in our sample had both full-benefit and partial-benefit dual-eligible status in 2009.

Source: Common Medicare Environment, Medicare Standard Analytical File claims, and Part D Medicare data. Dual eligibility defined using the Common Medicare Environment.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 6, 2013

On average, Medicare spending per user was higher for dual-eligible beneficiaries than for non–dual-eligible beneficiaries for inpatient services, outpatient services, skilled nursing facility services, home health care, hospice, durable medical equipment, physician and supplier services, and Part D drugs (Table 6-3). Per user Part D spending was almost three times higher for dual-eligible beneficiaries ($4,473) than for non–dual-eligible beneficiaries ($1,517). Compared with the younger dual-eligible population, per user Medicare spending was higher for dual eligibles age 65 or older for skilled nursing facility, home health care, hospice, and physician and supplier services. In contrast, compared with the dual-eligible population age 65 or older, per user Medicare spending for inpatient services, outpatient services, durable medical equipment, and Part D services was higher for dual-eligible beneficiaries under the age of 65. Medicare expenditures per user were higher for full-benefit dual-eligible beneficiaries than for partial-benefit dual-eligible beneficiaries for each type of service in this analysis and for Part D drugs.

In 2009, Medicaid spending on dual-eligible beneficiaries in Medicare FFS totaled $80 billion (Table 6-4). The Medicaid spending estimates include Medicaid FFS and managed care spending but do not include Medicaid payments of Medicare premiums. Almost 60 percent of Medicaid spending was for dual-eligible beneficiaries age 65 or older. However, dual-eligible beneficiaries under the age of 65 had slightly higher per capita Medicaid spending ($13,651) than the older dual-eligible population ($13,501). Combined Medicare and Medicaid spending for dual-eligible beneficiaries in 2009 was approximately $173 billion. Medicare accounted for just over half of combined spending for both the older (56 percent) and the younger (51 percent) dual-eligible populations. Total federal spending on dual-eligible beneficiaries—Medicare spending and the federal portion of Medicaid spending on dual-eligible beneficiaries—is not reflected in these estimates. Total federal spending on the dual-eligible population is higher than state spending for these beneficiaries.

Users of long-term care services and supports

LTSS users in our analysis consist of beneficiaries who utilized any Medicaid-covered institutional or community-based LTSS. Institutional LTSS includes psychiatric hospital services for the aged, inpatient psychiatric services for individuals age 21 years or younger, intermediate care facility services for persons with intellectual disabilities, and nursing facility services. Community-based LTSS consist of home health services, personal care services, and HCBS.

In 2009, slightly more than one-third (34 percent) of Medicare FFS dual-eligible beneficiaries utilized Medicaid-covered LTSS (Table 6-5, p. 156). A larger portion of dual-eligible beneficiaries age 65 or older used

TABLE 6–3

Medicare per user spending by type of service, 2009

Category of Medicare beneficiary	Per user Medicare FFS spending							Per user Part D spending
	Inpatient hospital	Outpatient services	Home health	Hospice	SNF	DME	Physician/ supplier	
All dual eligibles	$18,145	$1,829	$7,320	$13,261	$15,130	$1,248	$2,703	$4,473
Age 65 or older	17,973	1,811	7,590	13,370	15,214	1,077	2,893	3,828
Under age 65	18,453	1,853	6,542	12,183	14,679	1,527	2,434	5,367
Full benefit	18,532	1,849	7,462	13,726	15,395	1,292	2,757	4,675
Partial benefit	15,800	1,654	7,095	10,107	11,065	1,062	2,374	3,599
Non–dual-eligible Medicare beneficiaries	16,233	1,434	5,165	10,342	12,890	796	2,494	1,517

Note: FFS (fee-for-service), SNF (skilled nursing facility), DME (durable medical equipment). Outpatient services include outpatient hospital services and federally qualified health center services. Data exclude end-stage renal disease beneficiaries. The per capita spending amounts and combined spending were calculated using nonrounded numbers. Both full and partial dual-eligible beneficiaries are included in the analysis. "Full benefit" and "partial benefit" do not sum to 100 percent because 4 percent of the dual eligibles in our sample had both full-benefit and partial-benefit dual-eligible status in 2009.

Source: Common Medicare Environment, Medicare Standard Analytical File claims, Part D Medicare data, and Medicaid Statistical Information System data. Dual eligibility defined using the Common Medicare Environment.

LTSS (40 percent) than did those under the age of 65 (26 percent). However, Medicaid per capita spending was higher for the younger LTSS users ($44,560) than for the older LTSS users ($30,513).

Medicaid per capita spending was much higher for LTSS users ($35,031) than for non-LTSS users ($2,374). This finding is expected, given that LTSS users by definition utilize Medicaid-covered institutional or community-based long-term care services and non-LTSS users do not. Medicaid per capita spending on LTSS users was also more than twice as high as average Medicaid per capita spending for all dual-eligible beneficiaries ($13,564, shown in Table 6-4). The Medicaid per capita spending amount for all dual-eligible beneficiaries is a reflection of the lower Medicaid per capita spending on non-LTSS users ($2,374), who account for about two-thirds (66 percent) of dual-eligible beneficiaries.

The higher Medicaid per capita spending on LTSS users is also reflected in Medicare's portion of combined spending. For all dual-eligible beneficiaries, Medicare accounted for the majority of spending (54 percent, shown in Table 6-4). However, Medicare's portion of combined spending

TABLE 6–4

Combined Medicare and Medicaid spending, 2009

Category of Medicare beneficiary	Medicaid spending (in billions)	Per capita Medicaid spending	Combined Medicare and Medicaid spending (in billions)	Medicare's proportion of combined spending
All dual eligibles	$80.0	$13,564	$172.9	54%
Age 65 or older	46.1	13,501	103.7	56
Under age 65	33.9	13,651	69.2	51

Note: Data exclude end-stage renal disease beneficiaries. Total federal spending on dual-eligible beneficiaries (Medicare plus the federal portion of Medicaid) is not reflected in this table. The per capita spending amounts and combined spending were calculated using nonrounded numbers. Medicaid spending includes Medicaid fee-for-service and managed care spending. Medicaid payments of Medicare premiums are not included.

Source: Common Medicare Environment, Medicare Standard Analytical File claims, Medicare Part D data, and Medicaid Statistical Information System data. Dual eligibility defined using the Common Medicare Environment.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 13, 2013

TABLE 6–5

Spending for Medicaid LTSS and non-LTSS users, 2009

Category of dual eligible	Percent of beneficiaries	Per capita Medicare spending	Per capita Medicaid spending	Medicare's proportion of combined spending
		LTSS users		
All dual eligibles	34%	$23,398	$35,031	40%
Age 65 or older	40	24,585	30,513	45
Under age 65	26	20,893	44,560	32
		Non-LTSS users		
All dual eligibles	66	11,752	2,374	83
Age 65 or older	60	11,704	2,078	85
Under age 65	74	11,806	2,704	81

Note: LTSS (long-term care services and supports). Data exclude end-stage renal disease beneficiaries. The per capita spending amounts and combined spending were calculated using nonrounded numbers. Medicaid spending includes Medicaid fee-for-service and managed care spending. Medicaid payments of Medicare premiums are not included. Both full and partial dual-eligible beneficiaries are included in the analysis.

Source: Common Medicare Environment, Medicare Standard Analytical File claims, Medicare Part D data, and Medicaid Statistical Information System data. Dual eligibility defined using the Common Medicare Environment.

dropped to 40 percent for all dual-eligible LTSS users. In contrast, Medicare was the predominant payer (83 percent of combined spending) for dual-eligible beneficiaries who did not use LTSS. However, Medicare per capita spending was higher for dual-eligible beneficiaries who were LTSS users than for those who were non-LTSS users. Average Medicare per capita spending for all dual eligibles was $15,743 (Table 6-2, p. 154), reflecting higher Medicare per capita spending on LTSS users ($23,398) and lower Medicare per capita spending on non-LTSS users ($11,752) (Table 6-5).

Among dual-eligible beneficiaries who utilized LTSS in 2009, Medicaid per user spending was higher for institutional LTSS ($43,420) than for community-based LTSS ($19,908) (Table 6-6). This spending reflects the inclusion of room and board and other expenses that make Medicaid rates for institutional LTSS generally higher than the rates for community-based LTSS. Among LTSS users both under age 65 and 65 or older, Medicaid per user LTSS spending for institutional LTSS services was more than twice as high as the spending for community-based LTSS services.

TABLE 6–6

Medicaid spending for institutional and community-based LTSS spending, 2009

Category of dual-eligible LTSS user	Medicaid per user spending: Institutional LTSS	Medicaid per user spending: Community-based LTSS
All dual eligibles	$43,420	$19,908
Age 65 or older	38,196	13,582
Under age 65	67,299	28,672

Note: LTSS (long-term care services and supports). Data exclude end-stage renal disease beneficiaries. The per capita spending amounts and combined spending were calculated using nonrounded numbers. Medicaid spending includes Medicaid fee-for-service and managed care spending. Medicaid payments of Medicare premiums are not included.

Source: Common Medicare Environment, Medicare Standard Analytical File claims, Medicare Part D data, Medicaid Statistical Information System data. Dual eligibility defined using the Common Medicare Environment.

Severe and persistent mental illness

We defined beneficiaries as having SPMI if Medicare claims indicated that they had one of the following conditions: schizophrenia, schizoaffective disorder, bipolar disorder, major depressive disorder, or paranoid disorder. We selected these conditions to be consistent with the conditions that qualify a Medicare beneficiary to enroll in a chronic condition special needs Medicare Advantage plan. While other mental health conditions and substance abuse can also complicate Medicare beneficiaries' care,

EMBARGOED FOR RELEASE UNTIL 4:00PM JUNE 14, 2013

TABLE 6–7 **Medicare FFS beneficiaries with a severe and persistent mental illness, 2009**

Category of Medicare beneficiary	Number of SPMI beneficiaries	Percent of beneficiary category*	Percent of SPMI beneficiaries who are LTSS users	Per capita Medicare spending	Per capita Medicaid spending
All dual eligibles	1,303,700	20%	37%	$23,570	$16,403
Age 65 or older	400,700	10	66	32,562	25,303
Under age 65	903,000	32	24	19,580	12,454

Note: FFS (fee-for-service), SPMI (serious and persistent mental illness), LTSS (long-term care services and supports). Data exclude end-stage renal disease beneficiaries. The per capita spending amounts and combined spending were calculated using nonrounded numbers. SPMI is identified using Medicare claims and is defined as presence of schizophrenia, schizoaffective disorder, bipolar disorder, major depressive disorder, or paranoid disorder.
*The numerator and denominator use an "ever dual" definition that includes dual-eligible beneficiaries who switched between dual-eligible status and non–dual-eligible Medicare beneficiary or non–dual-eligible Medicaid beneficiary status during 2009. These beneficiaries who were not dual eligibles for the entire year were excluded from the results in Table 6-2 through Table 6-6. Medicaid spending includes Medicaid FFS and managed care spending. Medicaid payments of Medicare premiums are not included.

Source: Common Medicare Environment, Medicare Standard Analytical File claims, and Part D Medicare data. Dual eligibility defined using the Common Medicare Environment.

we focused exclusively on SPMI conditions for the purposes of this analysis.

In 2009, about 1.3 million beneficiaries, or 20 percent of all dual-eligible beneficiaries enrolled in FFS Medicare during the entire year, had at least one SPMI (Table 6-7). Almost one-third of dual-eligible beneficiaries under the age of 65 had an SPMI (32 percent) compared with 10 percent of the dual-eligible population over age 65. The presence of a disabling mental health condition can qualify an individual as disabled under SSDI, which is the main pathway to Medicare and dual-eligible status for individuals under the age of 65. Two-thirds of SPMI beneficiaries age 65 or older utilized LTSS in 2009, while less than one-quarter of the younger dual-eligible population with SPMI were LTSS users.

Among those with an SPMI, per capita Medicare and Medicaid spending was higher for dual-eligible beneficiaries age 65 or older than for the younger population. Further work needs to be done to better understand the SPMI population in general; however, higher per capita spending for older dual-eligible beneficiaries with SPMI could reflect the larger proportion of LTSS users among this population—who incur higher Medicare and Medicaid spending in general (Table 6-5)—greater overall use of health care services among this population, or the presence of comorbid conditions that increase utilization or that are costly to treat.

Care delivery systems for dual-eligible beneficiaries

Dual-eligible beneficiaries—both those enrolled in and those not enrolled in Medicare–Medicaid coordination programs—tend to have more complex medical and nonmedical needs than non–dual-eligible Medicare beneficiaries, according to our interviews with stakeholders in five states (see text box on the analytic methodology, pp. 158–159). Interviewees consistently reported that many dual-eligible beneficiaries need high-contact, on-the-ground, intensive care management, and their issues are not likely to be resolved in a few physician visits. Dual-eligible beneficiaries also tend to receive care from multiple medical and nonmedical providers, such as LTSS, behavioral health services, and social services. Communication across settings regarding a patient's care is not common. Medicare–Medicaid coordination programs focus on getting providers in various settings—for example, hospitals, physicians' offices, and social service agencies, among others—to communicate with one another regarding a beneficiary's care. Medicare–Medicaid coordination programs do not receive a separate Medicare payment for their care coordination activities; instead, they finance the activities through their current Medicare and Medicaid funds. These programs also seek to leverage community-based resources, including care coordination activities at federally qualified health centers (FQHCs) and community health centers (CHCs).

EMBARGOED FOR RELEASE UNTIL 1:00 PM JUNE 14, 2013

Analytic methodology

We assessed care coordination for dual-eligible beneficiaries through interviews with stakeholders who interact with beneficiaries in their communities. The goal of the analysis was to learn about care coordination under existing Medicare–Medicaid coordination programs. For that reason, we did not include the CMS financial alignment demonstrations that are being implemented in a few states. We conducted structured interviews with stakeholders in five states with Medicare–Medicaid coordination programs. We selected these five states to obtain variety in the degree of integration between Medicare and Medicaid within the programs and in the length of time each program has been operating:

- ***Florida—***The nursing home diversion program began in 1998. This program serves dual-eligible beneficiaries who require a nursing home level of care with the goal of keeping beneficiaries in the community rather than in nursing facilities. Enrollment in the program is voluntary. The program covers Medicaid nursing home and community-based long-term care services but does not include Medicare benefits.
- ***Massachusetts—***The Massachusetts Senior Care Options program began in 2004. Dual-eligible beneficiaries age 65 or older are eligible to enroll in the program on a voluntary basis. The program covers all Medicare and Medicaid benefits, including institutional and community-based long-term care services.
- ***Minnesota—***There are two Medicare–Medicaid coordination programs for dual-eligible beneficiaries in Minnesota. Minnesota Senior Health Options is the program for dual-eligible beneficiaries age 65 or older. The program began in 1997; it is voluntary and covers all Medicare and Medicaid acute care services, behavioral health

(continued next page)

EMBARGOED FOR RELEASE UNTIL 1:00 PM JUNE 14, 2013

Complex physical and nonphysical needs affect dual-eligible beneficiaries' health and require intensive care management

In general, interviewees across all five states described dual-eligible beneficiaries as having more complex care needs than other Medicare beneficiaries. Dual-eligible beneficiaries' physical health can be affected by poverty, inadequate housing, behavioral health conditions, physical or developmental disabilities, cognitive deficiencies, and frailty. For example, one interviewee described beneficiaries who were not compliant with their medication regimens—and were therefore at risk of rehospitalizations—because they could afford to fill prescriptions only after their Social Security checks arrived. Interviews across states consistently reported that dual-eligible beneficiaries needed more intensive care management than other Medicare beneficiaries. One care manager cited the multiple conditions of one under-65 dual-eligible beneficiary: paraplegic; wheelchair dependent; homeless; addicted to opiates, methadone, and alcohol; and diabetic. The care manager noted that this individual is an example of someone whose needs will not be resolved in a few physician or care manager visits.

Medicare–Medicaid coordination programs were generally reported to offer dual-eligible beneficiaries more high-contact, in-person, and intensive care management relative to MA plans and traditional FFS. Case managers reported attending doctor appointments (including behavioral health appointments) with beneficiaries, keeping track of beneficiaries' upcoming doctor appointments, becoming familiar with beneficiaries and their providers, and making home visits. With respect to beneficiaries with behavioral health conditions, one interviewee noted that being familiar with the beneficiary enables care managers to distinguish between baseline behavior and an acute behavioral health crisis.

Interviewees across states also emphasized the importance of coordination programs' care managers being familiar with social services and other resources that are available in beneficiaries' communities. However, one care manager from the North Carolina program noted that, while she can refer beneficiaries to social services, she cannot help them if waiting lists or funding cuts to social services limit their access. The care manager also noted that she can

Analytic methodology (cont.)

services, community-based long-term care services, and up to 180 days of nursing home care. Nursing home utilization after 180 days is paid for through fee-for-service (FFS) Medicare. Minnesota Special Needs Basic Care is a voluntary program for dual-eligible beneficiaries under the age of 65 with disabilities. It coordinates Medicare and Medicaid acute services and Medicaid behavioral health services.

- ***North Carolina—***The North Carolina Community Care Networks program is a medical home and shared-savings program for Medicaid beneficiaries. In 2010, it expanded to include Medicare benefits for dual-eligible beneficiaries. The program provides dual-eligible beneficiaries with care management. It receives a portion of the Medicare savings that may eventually accrue. Medicare benefits are paid through FFS under this program.
- ***Wisconsin—***The Wisconsin Partnership Program began in 1999. The program is voluntary and targeted at adults with physical disabilities and the nursing-home-certifiable elderly. It covers all Medicare services and all Medicaid acute services, community-based long-term care services, and nursing home services.

We interviewed primary care physicians, health systems, behavioral health providers, aging services organizations, community-based care managers, beneficiary advocates, stakeholders from federally qualified health centers and community health centers, and care managers and leadership staff at health plans operating Medicare–Medicaid coordination programs.

The interviews focused on all dual-eligible beneficiaries, including those enrolled in the above programs, those enrolled in Medicare FFS, and those enrolled in Medicare Advantage plans. ■

EMBARGOED FOR RELEASE UNTIL 1:00 PM JUNE 4, 2013

be a resource only for the community services that she is aware of. The North Carolina programs' continual care manager training and education help this care manager stay educated about community resources and other care management best practices.

The complex needs of dual-eligible beneficiaries can also affect their access to care. Transportation was often cited as a barrier to access to care across most states. For example, one Massachusetts care manager described a dual-eligible beneficiary with physical disabilities who lives on the second floor of a building without an elevator. This beneficiary missed medical appointments if no one was available to carry her down the stairs to exit her building. Some interviewees also noted a lack of public transportation in rural areas, and Medicaid-funded transportation services are sometimes unreliable. Interviewees in every state we interviewed said that access to behavioral health services is a challenge. Reasons for this problem include shortages of behavioral health providers, long waiting lists for behavioral health clinics, and behavioral health providers not accepting Medicare or Medicaid.

Dual-eligible beneficiaries receive care from multiple providers; their care is often fragmented among discrete providers

Dual-eligible beneficiaries receive care from multiple medical, LTSS, behavioral, and social services providers. Interviewees across states described the delivery system for dual-eligible beneficiaries as "siloed," with providers frequently not communicating with one another. Lack of coordination among providers is not limited to the transitions between Medicare and Medicaid services. Interviewees gave examples of coordination not occurring between community-based care managers, FQHCs, primary care providers, specialists, hospitals, nursing facilities, community-based LTSS providers, behavioral health providers, and social services. Coordination between physical and behavioral health was also highlighted as a problem across states. Some interviewees noted that navigating uncoordinated systems can be especially challenging for beneficiaries with cognitive impairments.

Many interviewees across states described poor communication occurring during care transitions. In

particular, interviewees described lack of communication between primary care providers (including FQHCs and CHCs) and hospitals and nursing facilities during care transitions. The primary care providers' ability to provide postdischarge follow-up care is compromised if they are not notified of a hospitalization or discharge from a nursing facility. Another common communication failure during care transitions occurs between hospitals or nursing facilities and care managers for community-based LTSS. One community-based LTSS care manager in Massachusetts cited an example of a nursing facility that did not communicate with the LTSS care manager on the date of a beneficiary's discharge to home. As a result, the necessary home care services were not in place and the individual was rehospitalized three times.

Poor coordination across discrete provider settings is an issue for dual-eligible beneficiaries in Medicare FFS, MA plans, and Medicare–Medicaid coordination programs. Reasons interviewees gave for the poor coordination include providers not having time to coordinate with one another, Medicare–Medicaid coordination programs or regular MA plans not managing all services for dual-eligible beneficiaries, and providers or health plans not being aware of the individuals with whom they should be coordinating. Having multiple care managers can also complicate coordination. Dual-eligible beneficiaries may be assigned separate care managers from a health plan, a primary care provider, a HCBS provider, and a behavioral health provider. Too many care managers who are not coordinating with each other can result in duplicative efforts or conflicting messages or services being given to the beneficiary.

Programs for dual-eligible beneficiaries use multiple practices to coordinate services across providers

Many interviewees noted that the Medicare–Medicaid coordination programs have a comprehensive approach to care management that extends beyond management of physical health. From our interviews with relevant personnel in the five states studied, we found that common care coordination practices across Medicare–Medicaid coordination programs include coordinating treatment and medication regimens across providers; linking dual-eligible beneficiaries with social services in the community; conducting home visits to assess beneficiaries and coordinate with HCBS providers; and focusing on care transitions, follow-up care after hospitalizations, and having HCBS services in place when beneficiaries are discharged home. One care manager from the North Carolina Community Care Networks program described herself as the beneficiary's resource for medical, behavioral, and social services and stated that she felt "empowered" by the program to help beneficiaries in ways that she could not before the program.

Some Medicare–Medicaid coordination programs assign or embed care managers in CHCs or hospitals. For example, one health plan in the Wisconsin Medicare–Medicaid program assigns a nurse practitioner to work with one CHC to coordinate dual-eligible beneficiaries' primary, specialty, and behavioral health care. The nurse practitioner visits the clinic almost every day, which enables her to communicate with the clinics' physicians, attend beneficiaries' appointments, and help with medication reconciliation by bringing updated medication lists to the clinic. Medicare–Medicaid coordination programs also sometimes coordinate with community-based providers. Care managers at one health plan in Wisconsin's program, for example, communicate with staff at assisted living facilities. In North Carolina's program, care managers in one region coordinate with staff at homes for mentally ill or disabled beneficiaries to address medication and care issues.

Medicare–Medicaid coordination programs can also facilitate electronic sharing of health information between providers and care managers. Providers reported that not having access to medical records and relying on phone calls and faxes to communicate were major barriers to providers coordinating with one another. Some health plans have access to the electronic medical record systems of providers in their region. They reported that this access helped them to collect information and manage beneficiaries. For example, one health plan has access to the electronic medical records of the providers in its network. Care managers at the health plan can send e-mails and messages to all providers on a beneficiary's care team, and providers can access beneficiaries' care plans and advanced directives.

Programs for dual-eligible beneficiaries can leverage the efforts of providers that take the initiative to coordinate a patient's care across settings

Medicare–Medicaid coordination programs can also leverage care management that is occurring in the community. Some providers and community-based care management organizations are knowledgeable about the community's HCBS and social services or are able to provide high-contact, in-person care. For example,

EMBARGOED FOR RELEASE UNTIL 11:00PM JUNE 14, 2013

one health plan in Minnesota's Special Needs Basic Care program for disabled beneficiaries employs its own care managers and contracts with care management organizations in the community and with behavioral health care managers. The health plan matches beneficiaries to a care manager with expertise in the beneficiary's disability, including being aware of which local resources are available to the beneficiary.

Some of the health plans in Massachusetts's Senior Care Options (SCO) program contract with an aging services agency. For the dual-eligible beneficiaries enrolled in the SCO program, care managers at the aging services agency conduct in-person assessments and make recommendations for a plan of care; they meet with beneficiaries monthly at first and then quarterly once the beneficiaries' care needs are stable. The SCO health plans can also refer to the agencies' network of social service agencies as needed. One of the smaller health plans in the SCO program locates some of the health plan's care managers at the aging services agency.

FQHCs and CHCs are uniquely positioned to coordinate care for dual-eligible beneficiaries

According to our interviews, many FQHCs and CHCs are uniquely positioned to coordinate care across many of the services that dual-eligible beneficiaries use. We interviewed FQHC or CHC staff in states except Minnesota, and this finding was consistent across states. FQHCs and CHCs serve Medicare beneficiaries, Medicaid beneficiaries, and the uninsured. They are in a unique position because they tend to provide combinations of primary care, behavioral health services, and care management. Some of the FQHCs and CHCs we interviewed also provide nutrition, pharmacy, lab, and radiology services at their clinics. They often provide multiple services at a single clinic, enabling patients to receive care for more than one condition during the same visit. For example, one Massachusetts FQHC offers both primary care and behavioral health services in its clinic. Up to half of the dual-eligible beneficiaries the clinic sees have behavioral health conditions. Every primary care office setting in the clinic has a behavioral health consult room, and a behavioral health provider is on site or on call at all times. Multiple services within the same FQHC or CHC also help care managers coordinate with the clinic's various providers. The clinics' care managers also often refer beneficiaries to social services.

Most of the FQHCs we interviewed were applying to become accredited as patient-centered medical homes by the National Committee for Quality Assurance. Contracting with these clinics can enable enrollees in Medicare–Medicaid coordination programs to have access to a medical home in their community. FQHCs and CHCs are limited, however, in the extent to which they can coordinate services. Because they are providers rather than payers, they may not have access to all medication information. Some FQHCs and CHCs reported being limited in the amount of care management they can afford. For example, one Florida FQHC serves about 63,000 patients and can afford to employ only 9 care managers. However, Medicare–Medicaid coordination programs can support the care management efforts of FQHCs and CHCs. In one region in North Carolina's Community Care Networks program, a care manager is jointly funded by an FQHC and the North Carolina program. ■

EMBARGOED FOR RELEASE UNTIL 6 MONTH JUNE 14, 2013

Endnotes

1 The 10 million is an estimate of any Medicare beneficiaries with dual-eligible status during 2011.

2 In our March 2013 report, the Commission recommended that Medicare Advantage dual-eligible special needs plans (D–SNPs) that clinically and financially integrate Medicare and Medicaid benefits should be permanently reauthorized by statute. Under this recommendation, D–SNPs moving forward would be Medicare–Medicaid coordination programs, rather than furnishing only Medicare services for dual-eligible beneficiaries, as some D–SNPs currently do.

3 Individuals who are 65 or older and do not have Social Security coverage can "buy in" to Medicare Part B; if they buy Part B, they can also purchase Part A. To purchase Medicare, a person must be a citizen or have been a legal resident for at least five years.

4 The 24-month waiting period is shorter for individuals with end-stage renal disease. There is no waiting period for individuals with amyotrophic lateral sclerosis.

5 Receiving SSI cash assistance qualifies individuals for Medicaid benefits in 39 states and the District of Columbia. Eleven states have more restrictive income limits for Medicaid eligibility than the SSI income limits. These states are referred to as 209(b) states (Woodcock et al. 2011).

6 In general, most states do not pay providers the full Medicare cost-sharing liability (Mitchell and Haber 2004).

7 Data are from the Commission's analysis of 2011 Common Medicare Environment. Medicare data generally undercount the number of Hispanics and as such incorrectly state the proportion of beneficiaries in other race categories. We adjusted the Common Medicare Environment data to address this issue.

8 Dual-eligible status was identified by using the 2009 Common Medicare Environment data.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

References

Alecxih, L. M., S. Lutsky, J. Corea, et al. 1996. *Estimated cost savings from the use of home and community-based alternatives to nursing facility care in three states.* Working paper 9618. Washington, DC: AARP.

Bella, M., Centers for Medicare & Medicaid Services. 2012. Examining Medicare and Medicaid coordination for dual-eligibles. Testimony before the Special Committee on Aging, U. S. Senate. July 18th.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2013. Long-term services & support. http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Long-Term-Services-and-Support/Long-Term-Services-and-Support.html.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2012. Medicaid Coverage of Medicare Beneficiaries (Dual Eligibles) at a Glance (January 2012). http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/medicare_beneficiaries_dual_eligibles_at_a_glance.pdf

Chatterji, P., N. R. Burstein, D. Kidder, et al. 1998. *Evaluation of the Program of All-Inclusive Care for the Elderly (PACE) demonstration: The impact of PACE on participant outcomes.* HCFA contract #500-96-0003/TO4. Report prepared by Abt Associates for the Health Care Financing Administration. Baltimore, MD: HCFA.

Government Accountability Office. 1995. *Medicaid: Restructuring approaches leave many questions.* GAO/HEHS–95–103. Washington, DC: GAO.

Grabowski, D. C. 2006. The cost-effectiveness of noninstitutional long-term care services: Review and synthesis of the most recent evidence. *Medical Care Research and Review* 63, no. 1 (February): 3–28.

Kaye, H. S. 2012. Gradual rebalancing of Medicaid long-term services and supports saves money and serves more people, statistical model shows. *Health Affairs* 31, no. 6 (June): 1195–1203.

Mancuso, D., G. Yamashiro, and B. Felver. 2005. *PACE: An evaluation.* Olympia, WA: Washington State Department of Social and Health Services Research & Data Analysis Division.

Medicare Payment Advisory Commission. 2013. *Report to the Congress: Medicare payment policy.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2012. *Report to the Congress: Medicare and the health care delivery system.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2010. *Report to the Congress: Aligning incentives in Medicare.* Washington, DC: MedPAC.

Mitchell, J. B., and S. G. Haber. 2004. State payment limitations on Medicare cost-sharing: Impact on dually eligible beneficiaries. *Inquiry* 41, no. 4 (Winter): 391-400.

O'Shaughnessy, C. V. 2013. *The basics: National spending for long-term services and supports (LTSS), 2011.* Washington, DC: National Health Policy Forum.

Shirk, C. 2008. *Medicaid and mental health services.* Background paper. Washington, DC: National Health Policy Forum.

Wieland, D., R. Boland, J. Baskins, et al. 2010. Five-year survival in a Program of All-inclusive Care for Elderly compared with alternative institutional and home- and community-based care. *Journal of Gerontology: Medical Sciences* 65, no. 7 (July): 721–726.

Woodcock, C., S. Cannon-Jones, A. Tripp, et al. 2011. *Pathways to Medicare–Medicaid eligibility: A literature review.* Baltimore, MD: The Hilltop Institute, UMBC.

Wysocki, A., M. Butler, R. L. Kane, et al. 2012. *Long-term care for older adults: A review of home and community-based services versus institutional care.* Comparative effectiveness review, no. 81. Prepared by the Minnesota Evidence-based Practice Center under Contract No. 290-2007-10064-I. AHRQ Publication No.12(13)-EHC134-EF. Rockville, MD: Agency for Healthcare Research and Quality. www.effectivehealthcare.ahrq.gov/reports/final.cfm.

EMBARGOED FOR RELEASE UNTIL 1:00 PM JUNE 14, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

CHAPTER 7

Mandated report: Medicare payment for ambulance services

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 11, 2013

RECOMMENDATIONS

7-1 The Congress should:

- allow the three temporary ambulance add-on policies to expire;
- direct the Secretary to rebalance the relative values for ambulance services by lowering the relative value of basic life support nonemergency services and increasing the relative values of other ground transports. Rebalancing should be budget neutral relative to current law and maintain payments for other ground transports at their level prior to expiration of the temporary ground ambulance add-on; and
- direct the Secretary to replace the permanent rural short-mileage add-on for ground ambulance transports with a new budget-neutral adjustment directing increased payments to ground transports originating in geographically isolated, low-volume areas to protect access in those areas.

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

7-2 The Congress should direct the Secretary to:

- promulgate national guidelines to more precisely define medical necessity requirements for both emergency and nonemergency (recurring and nonrecurring) ground ambulance transport services;
- develop a set of national edits based on those guidelines to be used by all claims processors; and
- identify geographic areas and/or ambulance suppliers and providers that display aberrant patterns of use, and use statutory authority to address clinically inappropriate use of basic life support nonemergency ground ambulance transports.

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

EMBARGOED FOR RELEASE UNTIL 1:00 PM JUNE 14, 2013

CHAPTER 7

Mandated report: Medicare payment for ambulance services

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Chapter summary

Section 3007(e) of the Middle Class Tax Relief and Job Creation Act of 2012 directed the Commission to report to the Congress by June 15, 2013, on the Medicare ambulance fee schedule. Specifically, the Commission was directed to examine the impacts of three temporary add-on payments made under the ambulance fee schedule on ambulance providers' Medicare margins. These three payment policies:

- increase payments for ground ambulance transports provided to beneficiaries in urban areas by 2 percent and in rural areas by 3 percent,
- increase payments for ground ambulance transports in "super-rural" areas by 22.6 percent, and
- designate certain counties as rural for purposes of applying a 50 percent increase in payments for air ambulance services provided in rural areas.

In addition to the temporary add-on payments, two permanent add-on payment policies apply if the ZIP code from which a patient is transported is rural: One increases the standard mileage rate by 50 percent for the first 17 miles for ground ambulance transports, and the other pays 50 percent more for air ambulance transports.

At the time the Commission was mandated to conduct this study, the three temporary payment provisions were expected to expire at the end of

In this chapter

- Introduction
- Framework to evaluate policy issues
- Background
- Growth in use of Medicare ambulance services suggests no access problems, but more rapid growth in nonemergency services raises concerns
- Dialysis-related ambulance transports raise fraud and abuse concerns
- Costs of providing ambulance services are difficult to isolate and policies to help cover costs where needed are not efficiently targeted
- Summary and recommendations

calendar year 2012. To best advise the Congress on expiration of the temporary provisions, the Commission conducted most of the analytic work underlying this chapter from March through October 2012, and the Commissioners voted on the recommendations in November 2012. The information presented here informed the Commission's decisions made at that time.

Medicare pays for ambulance services using a fee schedule that is similar in structure to the physician fee schedule. The fee schedule pays ambulance suppliers (those that are freestanding, non–institution based) and ambulance providers (those that are based at an institution, such as a hospital) a fixed payment that reflects the intensity of the ambulance service provided and a mileage rate that depends on the distance a patient is transported.

To conduct this study, we examined Medicare claims and cost data, analyzed reports from the Government Accountability Office (GAO) and Department of Health and Human Services Office of Inspector General, and held extensive discussions with representatives of ground and air ambulance suppliers and providers. We found:

- Of the approximately $5.3 billion in Medicare payments for ambulance services in 2011, the three temporary add-on payment policies accounted for about $192 million and the two permanent add-on payment policies accounted for approximately $220 million more, for total add-on payments of about $412 million, or about 8 percent of total Medicare payments for ambulance services.

- There was no evidence of Medicare beneficiaries having difficulty accessing ambulance services. We observed consistent growth in ambulance service use per beneficiary and spending for these services. The number of ambulance suppliers participating in Medicare grew steadily from 2007 to 2011.

- Medicare ambulance volume grew by roughly 10 percent from 2007 to 2011, and basic life support (BLS) nonemergency services grew more rapidly than more complex types of services. Much of the growth in BLS nonemergency transports was concentrated among a small share of ambulance suppliers and providers. Many of the newest suppliers entering the marketplace focus on providing nonemergency BLS services. Further, even more pronounced growth has occurred in nonemergency ambulance transports to and from dialysis facilities, and there is tremendous variation across states and territories in per capita spending for those types of transports.

- Medicare currently does not collect supplier cost data to set or update ambulance payment rates. GAO surveyed a sample of ambulance suppliers in

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

2012 and found that the 2010 median Medicare margin for the survey sample was 2 percent with the temporary add-ons and estimated that the margin would be –1 percent without the add-ons (Government Accountability Office 2012). GAO found that higher costs were associated with lower volume, more emergency versus nonemergency transports, and higher levels of government subsidies. The recent entry of for-profit suppliers and private equity firms into the ambulance industry indicates the availability of profit opportunities in the industry.

- Air ambulance transports made up less than 1 percent of total ambulance claims but, because of their high cost, represented 8 percent of total Medicare spending on ambulance services in 2011. The number of air ambulance suppliers has increased rapidly over the past 10 years, which coincides with implementation of the ambulance fee schedule in 2002 and its add-on payments for air ambulance services to rural areas.

- The current ground ambulance add-ons are not well targeted.

On the basis of these findings, the Commission made two recommendations to the Congress. These recommendations were transmitted to the Congress in November 2012, and therefore the budget impacts assumed adoption of the recommendations by January 1, 2013.

The first recommendation would allow the temporary add-ons to expire. Because their expiration might raise concerns about access, the recommendation includes two steps to maintain access. One step is to direct the Secretary to rebalance the relative values for ambulance services by lowering the relative value of BLS nonemergency services and increasing the relative values of other ground transports. Rebalancing should be budget neutral relative to current law and maintain payments (and thus access) for other ground transports at their level before expiration of the temporary ground ambulance add-on. The second step directs the Secretary to replace the permanent rural short-mileage add-on for ground ambulance transports with a new budget-neutral adjustment directing increased payments to ground transports originating in geographically isolated, low-volume areas to protect access in those areas. Adoption of this recommendation by January 1, 2013, would have resulted in a very small level of savings below the estimated spending under current law in 2013. The relative value unit rebalancing policy and the new permanent isolated low-volume policy are both budget neutral by design. The American Taxpayer Relief Act of 2012 in large part extended the add-ons by one year until January 1, 2014.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Because of evidence of inappropriate use of certain BLS nonemergency transports, we also recommend that the Congress direct the Secretary to: more precisely define medical necessity requirements for both emergency and nonemergency (recurring and nonrecurring) ground ambulance transport services, develop a set of national edits based on those guidelines to be used by all claims processors, identify geographic areas and ambulance suppliers and providers that display aberrant patterns of use, and use statutory authority to address clinically inappropriate use of BLS nonemergency ground ambulance transports. Reducing clinically inappropriate use of BLS nonemergency services should result in program savings. ■

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

Section 3007(e) of the Middle Class Tax Relief and Job Creation Act of 2012

(e) MEDPAC REPORT.—The Medicare Payment Advisory Commission shall conduct a study of—

(1) the appropriateness of the add-on payments for ambulance providers under paragraphs (12)(A) and (13)(A) of section 1834(l) of the Social Security Act (42 U.S.C. 1395m(l)) and the treatment of air ambulance providers under section 146(b)(1) of the Medicare Improvements for Patients and Providers Act of 2008 (Public Law 110–275);

(2) the effect these add-on payments and such treatment have on the Medicare margins of ambulance providers; and

(3) whether there is a need to reform the Medicare ambulance fee schedule under such section and, if so, what should such reforms be, including whether the add-on payments should be included in the base payment.

Not later than June 15, 2013, the Commission shall submit to the Committees on Ways and Means and Energy and Commerce of the House of Representatives and the Committee on Finance of the Senate a report on such study and shall include in the report such recommendations as the Commission deems appropriate. ■

EMBARGOED FOR RELEASE UNTIL 4:00 PM JUNE 14, 2013

Introduction

In section 3007(e) of the Middle Class Tax Relief and Job Creation Act of 2012, the Congress mandated that the Commission conduct a study of the Medicare ambulance fee schedule and submit a report by June 15, 2013 (see text box for the statutory provision). The mandate specifically directed the Commission to examine the temporary add-on payments for ambulance providers, which at the time this work was mandated were scheduled to expire at the end of 2012. Extending some or all of the add-ons would increase overall Medicare spending relative to the current-law baseline, unless the cost of extending those provisions was offset by other spending reductions. To respond promptly, we conducted this work from March through October 2012 and made recommendations to the Congress in November 2012.

Medicare spent $5.3 billion for ambulance services in 2011, about 1 percent of total program spending.[1] Ambulance services are covered under Medicare Part B, and beneficiaries pay 20 percent coinsurance for the covered ambulance services they receive after their Part B deductible is met. In 2011, about 5.2 million Medicare beneficiaries (16 percent of Part B beneficiaries in traditional fee-for-service (FFS) Medicare) used an ambulance service for which Medicare made a payment. Medicare beneficiaries use ambulance services for a variety of reasons, such as unscheduled emergency transport to a hospital emergency department for treatment of an acute illness or injuries from an accident; scheduled nonemergency transport upon discharge from an inpatient hospital to a skilled nursing facility (SNF) or to the person's home; and scheduled, repeated, and nonemergency transports to and from dialysis treatments.

The entities that bill Medicare for providing ambulance services are defined as suppliers, which are non-institutionally based (such as a local fire department, public emergency medical services agency, or private for-profit company), or providers, which are those based at a health care institution (such as a community hospital or nursing facility). All types of ambulance suppliers and providers are reimbursed under the Medicare ambulance fee schedule. The ambulance fee schedule was phased in beginning in 2002 and fully implemented in 2010. Before 2002, suppliers' payments were based on charges, and providers' payments were based on costs. A brief history of the development and implementation of the ambulance fee schedule is provided in online Appendix 7-A to this chapter, available at http://www.medpac.gov.

Framework to evaluate policy issues

The Commission approached the development of policy options for ambulance payment from the position that spending above the current-law baseline (which reflects

TABLE 7–1 **Change in number of ambulance suppliers and providers billing Medicare, 2008–2011**

Type of ambulance entity	2008 Number	2008 Percent of total	2011 Number	2011 Percent of total	Percent change in number of entities, 2008–2011
Suppliers	10,233	92.4%	10,630	93.6%	3.9%
Providers	840	7.6	725	6.4	–13.7
Total	11,073	100.0	11,355	100.0	2.5

Note: Suppliers are freestanding rather than institution-based entities. Providers are institution-based entities.

Source: MedPAC analysis of Medicare carrier and outpatient claims data.

the expiration of the statutory provisions we had been asked to review) would not be warranted unless there was strong evidence that doing so would improve access, or quality, or would advance reform of the health care delivery system. Therefore, we consider the evidence on:

- What effect would a possible action have on program spending relative to current law?
- Would the possible action improve beneficiaries' access to care?
- What is the effect of a potential action on the quality of care?
- Does the action advance delivery system reform? Does it move Medicare payment policy away from FFS payment and encourage a more integrated delivery system?

For each recommendation, we discuss the implications for these points.

Background

In this section, we first look at the structure of the ambulance industry. We then describe Medicare's ambulance payment system and specifically the add-on payments within it.

Industry structure

The ambulance industry is primarily made up of suppliers—that is, freestanding rather than institution-based entities (which Medicare terms providers)—and is becoming increasingly for profit. In 2011, 11,355 entities provided ambulance services to Medicare beneficiaries (Table 7-1). Of this total, 93.6 percent were suppliers and 6.4 percent were providers (almost all of which were hospital based).

Suppliers have outnumbered providers for many years; from 2008 to 2011, the number of suppliers increased 3.9 percent and the number of providers decreased 13.7 percent. Collectively, the number of suppliers and providers increased 2.5 percent during this time.

Suppliers

From 2008 to 2011, the number of noninstitutional suppliers of ambulance services billing Medicare increased from 10,233 to 10,630 suppliers (Table 7-1); for-profit suppliers grew more rapidly than other provider types.[2] According to the most current data available from the Census Bureau County Business Patterns data set, in 2010, 3,289 for-profit suppliers and 1,690 nonprofit suppliers were operating in the ambulance marketplace (Table 7-2).[3] For-profit suppliers may account for as much as 31 percent of suppliers billing Medicare in 2010, with nonprofit suppliers accounting for as much as 16 percent.[4] From 2008 to 2010, the number of for-profit suppliers of ambulance services grew more than twice as fast (8.4 percent) as the number of nonprofit suppliers (3.2 percent). Among the for-profit suppliers, those categorized as corporations and S corporations accounted for the vast majority of suppliers and their numbers increased from 2008 to 2010 by 8 percent and 16 percent, respectively.

Institution-based providers

In 2011, 725 institution-based providers billed the Medicare program for ambulance services. From 2008 to 2011, the number of providers billing Medicare decreased almost 14 percent (Table 7-1). This finding is in line with other anecdotal evidence suggesting that in recent

EMBARGOED FOR RELEASE UNTIL 1:00 PM JUNE 14, 2013

TABLE 7–2 **Growth in number of ambulance suppliers, 2008–2010**

Type of supplier	Data source	Number of suppliers 2008	Number of suppliers 2010	Change Number	Change Percent	Percentage of suppliers
Suppliers billing Medicare	Medicare claims	10,233	10,659	426	4.2%	100%
Nongovernment						
Nonprofit*	Census	1,637	1,690	53	3.2	16
For profit**	Census	3,033	3,289	256	8.4	31

Note: The Census Bureau does not provide a count of government ambulance suppliers.
*The Census Bureau's count of nonprofit suppliers does not include ambulance suppliers that are staffed with entirely voluntary staff.
**The Census Bureau's for-profit category for ambulance suppliers includes corporations, S corporations, sole proprietorships, and partnerships. Among this group, corporations and S corporations account for 87 percent of suppliers.

Source: MedPAC analysis of Medicare carrier and outpatient claims data and the Census Bureau's County Business Patterns data, by legal form of organization.

years hospitals have been exiting this line of business and instead have chosen to rely on private ambulance suppliers to provide this service (McCallion 2011b). Data from the American Hospital Association's annual survey identified a slight decline in the number of community hospitals reporting that they offered ambulance services during the 2008–2011 period. These data also indicate that large urban hospitals, small rural hospitals, critical access hospitals, and government hospitals were more likely than other types of hospitals to offer ambulance services.

Air ambulance suppliers and providers

In 2011, there were 420 air ambulance suppliers and providers that billed Medicare. From 2008 to 2011, the number of air ambulance suppliers and providers billing Medicare increased about 3 percent.

Revenue and payer mix

In 2011, ambulance industry revenues (including air and ground) amounted to approximately $13.9 billion. About 35 percent of ambulance revenue was attributable to Medicare, 40 percent to private payers, 10 percent to Medicaid, 10 percent to fees and subsidies (community taxes, federal grants, charity, and other), and 5 percent to out-of-pocket payments. These proportions can vary greatly by supplier and provider (Snyder 2011).

Private equity

In 2011, private equity firms made significant acquisitions in the ambulance industry, acquiring the two largest private ambulance companies and two other large regional ambulance suppliers.

- Clayton Dubilier & Rice, LLC, a private equity firm, acquired Emergency Medical Services Corporation, which owns, among other entities, American Medical Response, Inc., the largest ambulance company in the United States, in a leveraged buyout valued at $3.2 billion (De La Merced 2011).
- Warburg Pincus, LLC, a private equity firm, acquired Rural/Metro Corporation, the second largest ambulance company in the United States.
- Falck A/S, a private emergency medical and fire suppression services firm based in Denmark, and Europe's largest ambulance company, acquired LifeStar and Care Ambulance Service, two large regional private ambulance companies on the East and West Coasts, respectively. These acquisitions made Falck the third largest ambulance company operating in the United States (Falck A/S 2011, McCallion 2011a, McCallion 2011b).

Overall, in 2011 four commercial suppliers accounted for 20 percent of all industry revenue and many large ambulance companies acquired smaller ambulance entities (Snyder 2011). Reasons for consolidation in the ambulance industry may include the forecasted expansion of health insurance coverage under the Patient Protection and Affordable Care Act of 2010, the aging of baby boomers into the Medicare program, and a recent trend in financially stressed municipalities seeking to outsource their emergency medical services to private ambulance companies (McCallion 2011b).

EMBARGOED FOR RELEASE UNTIL 4:00PM JUNE 14, 2013

Ambulance payment basics

Coverage

Medicare Part B covers ambulance services including emergency and nonemergency transportation. In general, Medicare Part B covers ambulance services when other transportation could endanger the life of the beneficiary. Specifically, among other conditions, the transport must be medically necessary and to the nearest appropriate destination. See *Medicare payment basics: Ambulance services payment system* for a complete list of conditions (http://medpac.gov/documents/MedPAC_Payment_Basics_12_ambulance.pdf).

Ambulance transports that precede a Part A–covered stay are reimbursed under Part B and are not bundled into the payment for the Part A stay as a part of Medicare's 72-hour rule.[5] The cost of ambulance transports occurring during a Medicare Part A stay in an inpatient hospital or SNF is generally covered by the Part A payment, and Medicare does not make a separate payment under Part B. Once the beneficiary has been admitted for a Part A–covered inpatient stay, a separate Part B payment is allowed for an ambulance transport only under specific conditions.[6]

To determine the appropriateness of emergency and nonemergency transports, CMS relies on local protocols and physician certification procedures. For emergency transports, CMS guidance states that the determination to respond emergently with an advanced life support (ALS) or basic life support (BLS) ambulance must be in accord with the local 911 or equivalent service dispatch protocol but also that the beneficiary's condition at the scene may determine the appropriate level of response (Centers for Medicare & Medicaid Services 2002).[7]

CMS's written guidance for determining the appropriateness of nonemergency transports depends on the scheduled and recurring nature of the transport and relies on physician certification for validation in most cases.[8] However, unscheduled and nonrecurring nonemergency transports originating from beneficiaries' residences or facilities in which they reside, within which they are not under the care of a physician, do not require the supplier or provider to obtain physician certification.

Payment

Medicare's national ambulance fee schedule pays suppliers and providers for transport of the beneficiary to the nearest appropriate facility and for all items and services associated with the transport in a single payment. Medicare does not separately pay ambulance suppliers or providers for any services provided to a beneficiary during ambulance transport. Therefore, the single ambulance fee schedule payment includes items and services such as oxygen, drugs, extra attendants, and electrocardiogram testing when such services are medically necessary. In addition, Medicare does not reimburse for ambulance transport in the absence of an actual transport (i.e., if the ambulance crew responds to a call and finds the patient does not need transport).

Medicare Part B covers 80 percent of the Medicare-approved amount of a covered ambulance transport. Beneficiaries pay the remaining 20 percent of the Medicare-approved amount once they have reached the annual Part B deductible ($140 in 2012).[9] Beneficiaries' actual out-of-pocket coinsurance payment may be less than 20 percent of the allowed amount if they have supplemental insurance (such as medigap) that covers Part B coinsurance liabilities or if they are dually eligible for Medicare and Medicaid (the state Medicaid program may cover all, some, or none of the beneficiary coinsurance liability, depending on the state, but in any case the dually eligible beneficiary is not liable).

Standard fee schedule formula for ground ambulance services The national ambulance fee schedule has two components—a base payment and a mileage payment—whose sum is the total Medicare payment for each ambulance transport. The base payment consists of three parts: the relative value unit (RVU), which reflects the relative severity or service level of the ambulance transport; a conversion factor (CF), which is used to convert the RVU into a payment expressed in monetary terms; and a geographic adjustment factor (GAF), which is used to account for geographic differences in the cost of providing ambulance services.[10] These three parts are multiplied to generate the base Medicare payment for each ambulance transport. The payment for the mileage component is the product of miles traveled with the patient and a mileage rate determined by CMS.

Relative value units The ambulance fee schedule contains seven distinct levels of ambulance service, and each is assigned an RVU reflecting the resources required to serve a patient at each level of transport. Nonemergency BLS ambulance transports are assigned an RVU of 1.00. Higher RVU values are assigned to transports that require a higher intensity of service than the BLS nonemergency transport. The relative values were determined through a negotiated

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2012

TABLE 7–3 **Medicare ambulance service levels and conversion factors, 2012**

Ambulance service level	RVU	CF	Mileage rate
Ground transports			
BLS			
Nonemergency	1.00	$214.47	$6.74
Emergency	1.60	214.47	6.74
ALS			
Nonemergency	1.20	214.47	6.74
Emergency (level 1)	1.90	214.47	6.74
Emergency (level 2)	2.75	214.47	6.74
Specialty care transport	3.25	214.47	6.74
Paramedic ALS intercept	1.75	214.47	6.74
Air transports			
Fixed wing	1.00	2,910.50	8.74
Rotary wing (helicopter)	1.00	3,383.89	21.53

Note: RVU (relative value unit), CF (conversion factor), BLS (basic life support), ALS (advanced life support).

Source: CMS.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

rulemaking process prior to the beginning of the fee schedule in 2002.

Conversion factor The CF used for the national ambulance fee schedule is a dollar amount used to convert the RVU of a given ambulance case into a payment expressed in monetary terms. By statute, the CF is updated annually by the ambulance inflation factor, an amount equal to the percentage increase in the consumer price index for all urban consumers reduced by the 10-year moving average of multifactor productivity. The update for 2012 was 2.4 percent.

Geographic adjustment factor The GAF is intended to address regional differences in the cost of furnishing ambulance services. The nonfacility practice expense component of the geographic practice cost index (GPCI) is the GAF that is used as a part of the national ambulance fee schedule.[11] The ZIP code from which a Medicare beneficiary was transported by an ambulance establishes which GPCI is applied to generate the base payment. The GPCI applies to 70 percent of the base payment for ground ambulance cases and to 50 percent of the base payment for air ambulance cases.

Mileage payment The payment for the mileage component of the ambulance fee schedule reflects costs attributable to the use of the ambulance vehicle (e.g., fuel, maintenance, and depreciation) and is the product of mileage and a CMS-determined mileage rate. The term mileage is referred to by CMS as "loaded miles," or the miles an ambulance travels with a beneficiary from the point of pickup to the location of the nearest appropriate facility. The mileage rate is updated annually using the same ambulance inflation factor as is used to update the CF.

Table 7-3 shows the RVUs, CFs, and mileage rates for ambulance payment in 2012.

Add-on payment policies

From its inception, the Medicare ambulance fee schedule has incorporated several add-on payment policies tied to either the mode of ambulance transportation or the geographic location from which a beneficiary is transported. These add-on payment policies are supplemental to the standard fee schedule payment formula. The add-on payment policies hinge on CMS's geographic categorization of the ZIP code from which a beneficiary is transported as urban, rural, or a category unique to this payment system called "super-rural." CMS defines these three categories as follows:

- Urban ZIP codes are those located inside a metropolitan statistical area (MSA) (or in the case of New England, a New England county metropolitan area (NECMA)). Among the nearly 43,000 United

TABLE 7–4 **Estimated value of Medicare ambulance add-on payment policies, 2011**

Add-on payment	Add-on	Status	Number of claims receiving add-on payment	Spending (in millions)	Add-on payment per claim	Add-on payment per claim as share of average payment per claim
Ground ambulance add-on		Temporary	15,158,353	$134	$9	2.8%
Urban	2% added to base payment and mileage rate		11,569,397	86	7	2
Rural	3% added to base payment and mileage rate		3,588,956	49	14	3
Ground super-rural add-on	22.6% added to base payment	Temporary	547,830	41	74	15
Air rural county grandfathering	50% added to base payment and mileage rate	Temporary	8,295	17	2,026	50
Ground rural short mileage	50% added to mileage rate for the first 17 miles of the transport	Permanent	3,275,474	94	28	7
Air rural add-on	50% added to base payment and mileage rate	Permanent	58,532	126	2,144	50
Total				**412**		

Note: Not all columns of the table are additive, because some ambulance claims are eligible for multiple ground add-on payments. Some claims contain multiple phases of the same transport and can have both an air add-on payment and a ground add-on payment. In 2011, 24,000 urban air ambulance transports occurred that do not receive an add-on payment. Figures may not sum due to rounding.

Source: MedPAC estimates based on Medicare outpatient and carrier claims data files and Medicare ambulance fee schedule payment policies.

States Postal Service (USPS) ZIP codes in 2012, 52 percent were urban (22,240 ZIP codes).

- Rural ZIP codes are those located, in whole or in part, outside of an MSA or NECMA, or they are in an area wholly within an MSA or NECMA that has been identified as rural under the Goldsmith modification, which is a listing of rural areas that are isolated despite the fact that they are located within large counties that contain one or more metropolitan areas.[12] In 2012, 30 percent of all USPS ZIP codes were rural (12,827 ZIP codes).
- Super-rural ZIP codes are those located in a rural county (rural–urban commuting area) that is among the lowest quartile of all rural counties by population density. For the purpose of some add-on payment policies, super-rural ZIP codes also qualify as rural. In 2012, 18 percent of all USPS ZIP codes were super-rural (7,826 ZIP codes).

The 2012 ambulance fee schedule contained five add-on payment policies that supplement standard fee schedule payments: three temporary add-on policies that were expected to expire at the end of 2012 and two permanent add-on payment policies.

Temporary add-on payment policies

- The ground ambulance add-on payment policy increases the standard base payment and mileage rate for ground transports by 3 percent for transports originating in rural ZIP codes and by 2 percent for transports originating in urban ZIP codes. The original rationale behind this add-on payment policy was to transition ambulance suppliers and providers from the pre-2002 cost- and charge-based reimbursement system to the post-2002 fee schedule. This add-on policy was originally set at 2 percent for rural and 1 percent for urban but was increased to its current levels by the Medicare Improvements for Patients and Providers Act of 2008.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

- The super-rural add-on payment policy increases the base payment for ground ambulance transports by 22.6 percent when the point-of-pickup ZIP code is designated as super-rural. It is additive to the 3 percent ground ambulance policy for rural transports discussed previously (p. 176) and the permanent rural short mileage add-on discussed below. Mandated by the Medicare Modernization Act of 2003, this policy was implemented in July 2004. The original rationale for this policy was to address the higher costs of providing ambulance services in rural areas resulting from an overall lower volume of services.[13]

- In addition to a permanent add-on payment policy in place for rural air ambulance services, the air transport rural grandfathering add-on payment policy extends the benefits of the 50 percent add-on payment for air ambulance transports originating in urban areas that were formerly designated as rural. (In 2006, the Office of Management and Budget changed the designation of a number of areas from rural to urban based on census data.) The geographic areas affected by this exception include approximately 3,400 ZIP codes, or 8 percent of all ZIP codes, in 47 states. The original rationale for this policy was to ease the transition of providers serving urban communities formerly classified as rural communities and to promote access to air ambulance services.

Permanent add-on payment policies

- The rural short-mileage ground ambulance add-on payment policy has been a part of the Medicare ambulance payment system since 2002. This add-on payment policy increases the standard mileage rate by 50 percent for ground ambulance transports for the first 17 miles of transports that originate in rural ZIP codes. CMS's stated rationale for this policy at the time of implementation was to supplement the standard payment "with consideration of the circumstances of isolated, essential ambulance suppliers (that is, when there is only one ambulance service in a given geographic area) which may not furnish many trips over the course of a typical month because of a small rural population." CMS acknowledged in its 2002 ambulance payment system final rule that this policy might not be precise enough to limit the add-on payment to isolated low-volume ambulance providers and suppliers (Centers for Medicare & Medicaid Services 2002).

- The rural air transport add-on payment policy reimburses providers and suppliers 50 percent more than the urban air ambulance base payment and mileage rate, if a beneficiary is transported from a rural ZIP code. This policy was included in the Medicare ambulance fee schedule at its inception. In its 2002 ambulance payment system final rule, CMS stated that this policy was also intended to supplement the standard payment "with consideration of the circumstances of isolated, essential ambulance suppliers which may not furnish many trips over the course of a typical month because of a small rural population" (Centers for Medicare & Medicaid Services 2002).

Estimated value of the ambulance add-on payment policies

In 2011, the five ambulance add-on payment policies increased payments to ambulance suppliers and providers by approximately $412 million (Table 7-4), or about 8 percent of total ambulance payments. Nearly all Medicare ambulance claims (15.2 million) received at least one of the five add-on payments.[14] The three temporary add-ons accounted for $192 million, or just under 4 percent of total payments.

Growth in use of Medicare ambulance services suggests no access problems, but more rapid growth in nonemergency services raises concerns

Growth in beneficiaries' use of ambulance transports and in payments per claim suggests that beneficiaries' access to ambulance services is not a problem. However, in the absence of clear national guidance on medical necessity, substantial growth in nonemergency dialysis transports, the concentration of these services among a subset of suppliers, and spending for these services in some states reaching three times the national average suggest excessive or inappropriate use of this benefit. Further, numerous criminal cases involving nonemergency dialysis transports have been investigated by the Department of Health and Human Services Office of Inspector General and prosecuted by the Department of Justice.

Growth in use of Medicare ambulance services suggests access is good

In 2011, ambulance suppliers and providers received approximately $5.3 billion in Medicare FFS payments for ambulance services, or about 1 percent of all Medicare

EMBARGOED FOR RELEASE UNTIL 1:00 PM JUNE 14, 2013

TABLE 7–5 **Growth in Medicare ambulance spending and claims volume, 2007–2011**

Utilization measure	2007	2008	2009	2010	2011	Average annual percent change 2007–2011
Total Medicare payments (in billions)	$4.4	$4.7	$5.0	$5.2	$5.3	5.3%
Payments per FFS beneficiary	$126	$136	$148	$152	$152	5.2
Total Medicare claims (in millions)	13.8	14.1	14.4	15.0	15.2	2.5
Claims per 100 FFS beneficiaries	39.9	41.3	42.6	43.8	43.8	2.6
Ambulance users per 100 FFS beneficiaries	13.9	14.3	14.4	14.6	14.6	1.3
Claims per FFS user	2.87	2.90	2.97	3.00	3.01	1.2
Payments per FFS user	$906	$955	$1,030	$1,041	$1,044	3.8
Payments per claim	$316	$329	$347	$347	$347	2.5

Note: FFS (fee-for-service). Denied ambulance claims have been removed from this analysis. Average annual percent change numbers are calculated from original (unrounded) data.

Source: MedPAC analysis of Medicare carrier and outpatient claims files.

spending (Table 7-5). From 2007 to 2011, Medicare payments for ambulance services per FFS beneficiary increased at an average annual growth rate of 5.2 percent. About half of this amount is accounted for by claim volume growth and half by growth in payments per claim.[15]

BLS nonemergency transports grew faster than most other types of transports

From 2007 to 2011, ambulance transport volume per FFS beneficiary increased 9.9 percent (Table 7-6). Within this aggregate growth, we note:

- Over 94 percent of services were provided by suppliers, and the small share provided by institutional providers was decreasing.
- In 2011, ground ambulance claims accounted for nearly all of the ambulance transports, with air transports accounting for less than 1 percent of claims. (In contrast, air ambulance transports accounted for 8 percent of spending. See online Appendix 7-B, available at http://www.medpac.gov, for an analysis of 2011 Medicare ambulance claims and payments by type of service.) Due to more rapid growth in ground transports in recent years, the proportion of ground transports has increased, while the proportion of air transports has decreased.
- BLS transports grew faster relative to ALS transports (10.9 percent vs. 8.1 percent); more specifically, BLS nonemergency transports grew faster than BLS emergency transports (11.4 percent vs. 9.6 percent). (Specialty care transport claims also increased rapidly, but they represent less than 1 percent of all ambulance claims.)
- Urban claims represented the largest share of claims and grew most rapidly (10.7 percent).

BLS nonemergency transports grew more rapidly in urban locations

The shares of service types differ by urban, rural, and super-rural location (Table 7-7, p. 180). For example, in 2011, air transports made up 5 percent of claims in super-rural areas compared with a negligible number in urban areas. BLS nonemergency transports were the most common service among those originating from urban ZIP codes (45 percent), while ALS emergency transports were more common when the transports originated in rural and super-rural ZIP codes (41 percent and 52 percent, respectively).

As shown in Table 7-8 (p. 180), from 2007 to 2011, urban BLS nonemergency transports grew faster than other transports at 12.5 percent. By contrast, ALS emergency transports were the fastest growing service in rural and super-rural ZIP codes. Although the volume of these transports was low, ALS nonemergency transports declined in all ZIP codes.

BLS nonemergency transports concentrated among small group of suppliers

BLS nonemergency transports, which have grown rapidly, have been a major source of revenue for some suppliers

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

TABLE 7–6

Medicare ambulance claim volume by service type, 2011

Type of ambulance service	Number of claims*	Percent of total number of claims	Total percent change in number of claims per FFS beneficiary from 2007 to 2011
All claims	15,245,169	100.0%	9.9%
Noninstitutional suppliers	14,373,237	94.3	11.0
Institutional providers	871,932	5.7	–5.8
Ground	15,128,166	99.2	10.0
Air	85,293	0.6	3.6
Ground			
Emergency	8,316,215	54.6	9.9
Nonemergency	6,722,609	44.1	9.6
Specialty care transport	115,613	0.8	35.5
Ground			
BLS	9,217,940	60.9	10.9
Nonemergency	6,350,557	42.0	11.4
Emergency	2,880,528	19.0	9.6
ALS	5,808,084	38.4	8.1
Nonemergency	372,978	2.5	–14.1
Emergency (level 1)	5,306,246	35.1	10.2
Emergency (level 2)	129,476	0.9	4.9
Paramedic intercept	3,111	0.0	–13.8
Specialty care transport	115,613	0.8	35.5
Urban	11,589,720	76.0	10.7
Rural	3,077,445	20.2	8.0
Super-rural	576,902	3.8	5.9

Note: BLS (basic life support), ALS (advanced life support). Super-rural ZIP codes are those located in a rural county (rural–urban commuting area) that is among the lowest quartile of all rural counties by population density.
*Totals for groups of service types may not sum to the "all claims" total due to multiple types of services appearing on a single ambulance claim.

Source: MedPAC analysis of Medicare carrier and outpatient claims files for 2007 and 2011.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

and providers. Because of their nature of being potentially scheduled transports, it is reasonable to assume that BLS nonemergency transports may have lower standby costs than emergency transports. Some suppliers and providers appear to focus almost exclusively on BLS nonemergency transports. For example:

- In 2011, approximately 1,000 suppliers and providers (16 percent of the industry) focused 90 percent to 100 percent of their business on BLS nonemergency transports and accounted for 27 percent of all BLS nonemergency transports.
- From 2008 to 2011, 1,489 new ambulance suppliers and providers began billing Medicare for ambulance transports, and these suppliers and providers have provided a disproportionate share of BLS nonemergency services since they entered the program. Comparing the 1,489 new entities with all other suppliers and providers, 65 percent of the transports completed by the new suppliers and providers were BLS nonemergency transports. By contrast, just 41 percent of the transports completed by more established suppliers and providers were BLS nonemergency transports.

Transports to dialysis facilities growing rapidly and vary greatly by state

Transports to and from dialysis facilities are a large share of all claims and have grown noticeably in recent years.

TABLE 7–7 **Service mix of ambulance claims by location, 2011**

Service type	Urban	Rural	Super-rural	All
Air	0%	1%	5%	1%
Ground				
BLS				
Nonemergency	45	34	14	42
Emergency	19	18	24	19
ALS				
Nonemergency	2	5	6	3
Emergency (levels 1 & 2)	33	41	52	36
Special care transport	1	1	1	1
Paramedic intercept	0	0	0	0
Ground total	100	100	100	100

Note: BLS (basic life support), ALS (advanced life support). Super-rural ZIP codes are those located in a rural county (rural–urban commuting area) that is among the lowest quartile of all rural counties by population density. Columns may not add to 100 percent due to rounding.

Source: MedPAC analysis of Medicare carrier and outpatient claims files.

In 2011, transport to or from a dialysis facility was the second most common transport route, accounting for 2.3 million transports or 15 percent of all transports. In the five-year period between 2007 and 2011, the volume of dialysis facility transports increased 20 percent—more than twice the rate of all other transports combined (Table 7-9). (The most common transport route was from beneficiaries' residences to a hospital. This trip occurred 4.8 million times in 2011, accounting for 32 percent of all transports in 2011.)

In 2011, ambulance transports to and from dialysis facilities accounted for nearly $700 million in Medicare spending, or approximately 13 percent of Medicare ambulance spending. Of dialysis facility transports in 2011:

- Ninety-seven percent were BLS nonemergency transports.
- Eighty percent originated in urban locations.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

TABLE 7–8 **Growth in number of emergency and nonemergency ambulance claims per fee-for-service beneficiary by location, 2007–2011**

Service type	Urban	Rural	Super-rural	All
All claims	10.7%	8.0%	5.9%	9.9%
BLS	12.2	6.8	0.7	10.9
Nonemergency	12.5	7.2	–3.1	11.4
Emergency	11.1	5.6	3.0	9.6
ALS	7.7	9.1	9.8	8.1
Nonemergency	–17.4	–8.4	–18.1	–14.1
Emergency	9.4	11.7	13.8	10.2

Note: BLS (basic life support), ALS (advanced life support). Super-rural ZIP codes are those located in a rural county (rural–urban commuting area) that is among the lowest quartile of all rural counties by population density.

Source: MedPAC analysis of Medicare carrier and outpatient claims files.

TABLE 7–9

Frequency and growth rate of Medicare ambulance transports by origin and destination code, 2011

Transport origin and destination	Number of claims	Share of claims	Percent change, 2007–2011
Residence to hospital	4,816,083	32%	8%
Dialysis facility (to or from)	2,334,188	15	20
Hospital to SNF	1,931,063	13	7
SNF to hospital	1,618,718	11	0
Accident scene to hospital	1,216,374	8	12
Hospital to hospital	1,040,776	7	15
Multiple destinations	580,377	4	18
Residential facility to hospital	566,680	4	30
Hospital to residence	543,337	4	12
Hospital to residential facility	265,093	2	5
Other	174,341	1	8
Physician's office to hospital	158,139	1	15
Total	15,245,169	100	10
Total excluding dialysis transports	12,910,981	85	9

Note: SNF (skilled nursing facility). Percents do not sum to 100 due to rounding.

Source: MedPAC analysis of Medicare carrier and outpatient claims files.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

- Nearly 50 percent traveled to or from a beneficiary's residence to a dialysis facility; from 2007 to 2011, the number of these transports increased roughly 15 percent.
- Forty-four percent traveled between a SNF and a non-hospital-based (freestanding) dialysis facility; from 2007 to 2011, the number of these transports increased over 50 percent.

Medicare dialysis beneficiaries are more likely than other Medicare beneficiaries to have an ambulance transport in a given year and total payments for ambulance transports for dialysis beneficiaries, particularly to and from dialysis facilities, have grown rapidly in recent years.[16] In 2011, Medicare paid nearly $1 billion to transport dialysis beneficiaries to or from any type of facility. Among the nearly 350,000 Medicare dialysis beneficiaries, approximately 53 percent had an ambulance claim submitted on their behalf for any type of transport, amounting to approximately 3.7 million total ambulance claims. Dialysis beneficiaries who were ambulance users in 2011 had an average of 20 ambulance transports per year. This use was concentrated, as 5 percent of ambulance users had over 130 dialysis-related transports per year. This amounted to approximately $33,000 per user and collectively accounted for 53 percent of ambulance spending on dialysis beneficiaries.

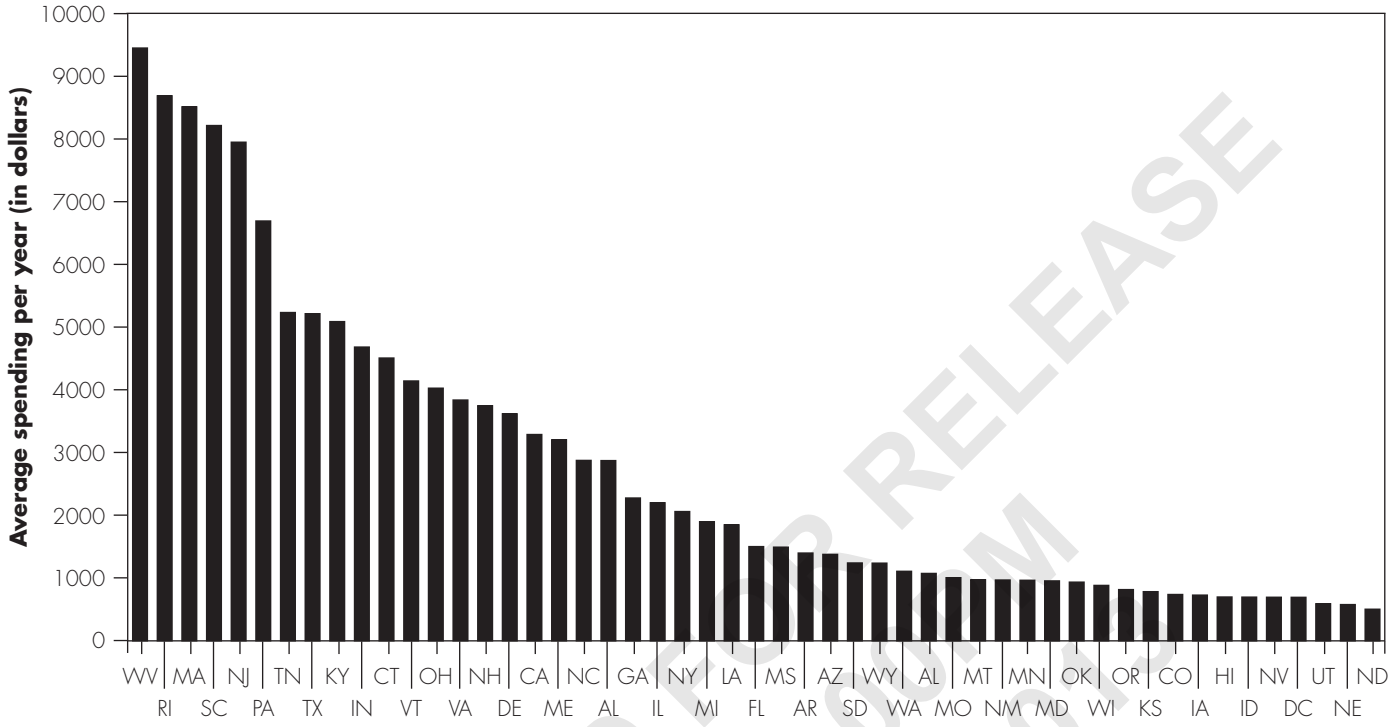
In addition, in 2011 Medicare's dialysis-facility transports were concentrated among a small group of ambulance suppliers and providers. Similar to the 16 percent of noninstitutional suppliers that focused exclusively on BLS transports and accounted for a disproportionately large share of the BLS market, about 800 suppliers and providers devoted more than half of their business to transporting dialysis beneficiaries to dialysis facilities. A subset of this group—about 200 ambulance suppliers and providers—devoted more than 90 percent of all their transports to conveying dialysis beneficiaries to and from dialysis facilities, accounting for approximately 7 percent of transports.

Ambulance spending per dialysis beneficiary varies significantly by state and territory

In recent years, national and state-level spending for ambulance transports per dialysis beneficiary increased dramatically. Using data from the United States Renal Data System (USRDS), we found that spending on ambulance services per dialysis beneficiary almost doubled from 2005 to 2009 (the latest year for which

FIGURE 7–1

Average annual spending on ambulance services per hemodialysis beneficiary, by state, 2009



Note: Puerto Rico (not shown on chart) had an average of $25,000 in ambulance spending per beneficiary hemodialysis year in 2009 (spending is adjusted for the number of months beneficiaries are actively on dialysis).

Source: United States Renal Data System, 2011 Report.

EMBARGOED FOR RELEASE UNTIL 1:01PM JUNE 14, 2012

data were available at the time of the analysis), growing from approximately $1,600 per dialysis beneficiary to $2,800 per dialysis beneficiary. This spending was much higher than average in West Virginia ($9,500), Rhode Island ($8,700), Massachusetts ($8,500), South Carolina ($8,200), New Jersey ($8,000), and Pennsylvania ($6,700) (Figure 7-1).[17] A more dramatic outlier was Puerto Rico, with spending exceeding $25,000 per dialysis beneficiary in 2009.

The six states identified as high ambulance spending states using 2009 USRDS data (West Virginia, Rhode Island, Massachusetts, South Carolina, New Jersey, and Pennsylvania) displayed significantly higher average ambulance spending per dialysis beneficiary using 2011 Medicare claims data. These six states were again among the highest spending states in 2011, and overall average ambulance spending per dialysis beneficiary was higher in 2011 than it was in 2009 for most states. The only exception was Puerto Rico, which had significantly lower average spending in 2011 (approximately $7,600 per dialysis beneficiary) than was observed in 2009. We estimate that the Medicare program could save about $150 million a year if spending per dialysis beneficiary in high-use states could be brought down to the level of spending in the state at the 75th percentile of spending, and $460 million if spending per dialysis beneficiary in high-use states could be brought down to the level of spending in the state at the 50th percentile of spending.

Dialysis-related ambulance transports raise fraud and abuse concerns

Three entities responsible for Medicare program oversight are currently involved in anti-fraud and abuse work related to Medicare ambulance services. The Department of Health and Human Services Office of Inspector General (OIG) has been investigating fraud in the context of dialysis-related ambulance transports. Medicare

administrative contractors (MACs) increased the number of ambulance transport claim denials in 2010 and 2011. Medicare's recovery audit contractors review ambulance transports occurring during a Part A inpatient or SNF stay and thus have a somewhat limited impact on the oversight of ambulance transports.

Office of Inspector General investigates ambulance fraud involving dialysis-related transports

OIG released three studies between 1994 and 2006 indicating that Medicare's ambulance transport benefit was highly vulnerable to abuse. The OIG 2006 report concluded that ambulance transport error rates had fallen since the agency's earlier reports but stated that "nonemergency transports and transports to or from dialysis facilities continue to be problematic" (Office of Inspector General 2006). OIG determined that 25 percent of ambulance transports in 2002 did not meet Medicare program requirements, resulting in an estimated $402 million in improper payments that year. The report recommended that CMS and its claims-processing contractors increase efforts to prevent improper payment of ambulance claims, particularly for dialysis and nonemergency transports, which are at the greatest risk for error.

OIG has continued to investigate and find specific cases of ambulance-related fraud and abuse. OIG is currently analyzing trends in ambulance utilization from 2002 to 2011 and examining questionable billing for ambulance services, such as transports that may have never occurred or potentially medically unnecessary transports to dialysis facilities. In addition, OIG has reported the following criminal case summaries (Office of Inspector General 2011):

- In North Carolina, a physician-owned ambulance company was found to have, between 2002 and 2005, "routinely conducted unnecessary transportation of patients to and from dialysis centers by ambulance that should have been transported by other means." The owner was sentenced to 28 months incarceration and ordered to pay over $400,000 in restitution to Medicare.
- In East Texas, the co-owners of an ambulance company were sentenced to 9 years' incarceration and ordered to pay $1.7 million in restitution after being convicted for submitting false claims to Medicare and Medicaid between 2004 and 2007 "to obtain reimbursements for transporting dialysis patients who did not meet the required criteria for ambulance transportation."

CMS contractors' involvement in ambulance transport oversight

Recent growth in the volume of denied Medicare ambulance claims for BLS nonemergency transports suggests that CMS's MACs have increased their scrutiny of ambulance transport claims. In 2011, approximately 12 percent of submitted BLS nonemergency claims were denied (860,000 claims). From 2007 to 2011, BLS nonemergency claim denials increased by approximately 18 percent. By contrast, about 7 percent of ALS emergency claims were denied (390,000 claims) and these denials grew just 2 percent from 2007 to 2011.

MACs can take targeted action to rein in overutilization of ambulance services. For example, the MAC for the state of Texas before 2013, Trailblazer, successfully implemented a series of auditing actions aimed at controlling overutilization of ambulance transports to and from dialysis facilities.[18] These actions included both broad data analysis and more targeted claims reviews and culminated in implementation of a "utilization guideline" within the ambulance local coverage determination guidance for transports to and from dialysis facilities. Beginning on January 1, 2010, Trailblazer limited beneficiaries to 12 transports of this type per year. The justification Trailblazer used for establishing a threshold of 12 transports is unclear. Medicare claims data show that from 2007 to 2011 ambulance transports of this type in Texas declined by 64 percent compared with an 18 percent increase from 2007 to 2011 in these transports nationally.

Costs of providing ambulance services are difficult to isolate and policies to help cover costs where needed are not efficiently targeted

To determine the appropriateness of the three temporary and two permanent add-on payments supplementing ambulance fees, typically we would identify the cost of ambulance services and examine the relationship between Medicare's payments and suppliers' and providers' costs. This relationship is commonly quantified as the Medicare payment margin (Medicare payments less costs divided by payments). However, noninstitutional ambulance suppliers (about 94 percent of the industry) do not submit cost report

EMBARGOED FOR RELEASE UNTIL 1 AM EDT JUNE 14, 2013

data to Medicare.[19] Among the 6 percent of institutional providers that submit cost report data, ambulance costs are very difficult to disentangle from nonambulance costs, as these providers share costs across their different lines of business, such as ambulance and emergency department services. Further, it is impossible to separate air from ground transport costs. In addition, these cost report data proved to be inconsistent, varying greatly from one year to the next. Moreover, among other possible data sources, we found that complete and consistent cost data representing all types of ambulance entities were not available and that the cost structure of ambulance entities varies widely because of the different organizational structures that exist within the industry.

In a 2012 report on Medicare margins for ground ambulance suppliers, GAO found that the 2010 median Medicare margin for the sample of suppliers in the survey was 2.0 percent including the temporary add-ons; GAO estimated the margin would have been –1.0 percent excluding the add-ons (Government Accountability Office 2012). However, there was considerable variation in reported margins among those suppliers and providers that responded to GAO's survey. As a result, GAO's 95 percent confidence interval estimate indicated that the likely median Medicare margin for the entire sector ranged from –2.3 percent to 9.3 percent with the add-ons, and from –8.4 percent to 5.3 percent without the add-ons. In other words, based on the survey sample, there is a 95 percent probability that the median Medicare margin for the entire sector was within these ranges in 2010.[20] In addition, GAO found that higher costs were associated with lower volume, more emergency versus nonemergency transports, and higher levels of government subsidies.[21]

Low-volume providers have substantially higher costs per transport

GAO's 2012 report concluded that economies of scale are present in the ambulance industry; that is, suppliers and providers with a lower volume of transports in a given year had higher relative costs per transport (Government Accountability Office 2012). Because some ambulance costs are fixed, as the number of transports provided by a given supplier or provider increases, the average cost per transport decreases. GAO identified a threshold of 600 ambulance transports per year above which a supplier's or provider's costs per transport begin to flatten out. In other words, while per transport costs are relatively flat across suppliers and providers with more than 600 transports, the average cost per transport is higher for suppliers and providers with 600 or fewer transports per year because they have fewer transports over which to spread their fixed costs. GAO's identification of such economies of scale is consistent with the findings of two previous GAO reports on ambulance costs and Medicare payments (Government Accountability Office 2007, Government Accountability Office 2003). The latest report's identification of the inflection point of 600 transports per year (or fewer than 2 transports per day) suggests that the very smallest ambulance suppliers and providers have higher costs per transport and provides a potentially useful marker for refining the payment adjustments Medicare makes to preserve access to ambulance services where it is most needed.

Medicare's add-on payments do not efficiently direct payments to isolated, low-volume rural areas

Consistent with GAO's general conclusion, we concur that a payment adjustment may be warranted for certain low-volume providers. However, our examination of payment-related geographic classifications finds that payment adjustments should be directed to providers and suppliers in isolated areas with a low volume of transports because of their location, not because of competition from neighboring providers or suppliers.

Medicare ambulance payments partly depend on the ZIP code from which a transport originates; thus, payments vary according to the GPCI associated with that ZIP code and classification of the ZIP code as urban, rural, or super-rural. Ambulance transports originating in ZIP codes classified as super-rural receive a 22.6 percent bonus payment. We find this policy assumes certain characteristics about super-rural areas that are not borne out in the data and that suggest the need for a policy adjustment:

- Ten percent of super-rural ZIP codes have populations of over 10,000 and account for more than half of super-rural transports.
- More than 7 percent of super-rural ZIP codes contain two or more hospitals or SNFs.
- In general, there is a mismatch between the geographic unit of analysis used to define areas as super-rural (counties) and the payment area (ZIP codes). Super-rural ZIP codes are those in a rural county that is in the lowest quartile of rural counties arrayed by population density. Thus, a ZIP code with a large population and multiple health care facilities can be designated as super-rural because it is in a sparsely populated county.

EMBARGOED FOR RELEASE UNTIL 6:00PM JUNE 15, 2015

Similarly, the permanent add-on policy for rural ground transports is not well targeted. Although the cost of providing transports is higher in isolated, low-volume rural areas, most of the add-ons go to suppliers and providers in more populated, less isolated areas. In 2011, the permanent short mileage add-on policy for rural ground ambulance transports cost an estimated $94 million. This policy increases the mileage rate for the first 17 miles by 50 percent for ground transports when a patient is transported from a rural ZIP code. Although the intent of this policy may be to increase payments for ambulance suppliers and providers that face circumstances that raise their costs when providing short-mileage transports for Medicare beneficiaries residing in rural areas, the policy is not well targeted because it increases payments for all ground transports in any rural ZIP code. This is problematic because the criteria of transports being rural and short mileage are not good indicators of low volume, isolation, or high costs. Under this policy, suppliers can have a volume of transports well beyond a reasonable low-volume standard and still receive the add-on. In fact, more than 80 percent of the short mileage payments go to the 25 percent of ZIP codes with the largest populations (the average population of those ZIP codes exceeds 12,000).

Summary and recommendations

Rethinking add-on payments for ambulance services

In summary, the Commission finds:

- There is no evidence of Medicare beneficiaries having difficulty accessing ambulance services. We observed consistent growth in ambulance service use per beneficiary and in spending for these services.
- Growth for BLS nonemergency transports is more rapid than for other types of transports, particularly transports to or from a dialysis facility. A small group of ambulance suppliers and providers have focused on BLS nonemergency and dialysis transports in recent years and new entrants have tended to also focus on these transports.
- For-profit suppliers and private equity firms are rapidly entering into the industry. For-profit suppliers grew by more than 8 percent between 2008 and 2010, while nonprofit suppliers grew by about 3 percent and government suppliers grew by about 2 percent.
- The current ground ambulance add-ons are not well targeted. Costs of providing transports are higher in isolated, low-volume rural areas, but most of the current add-ons go to suppliers and providers in more populated, less isolated areas.
- The temporary air add-on policy, intended as a transitional policy, has fulfilled its purpose and providers have had ample time to adjust to their new geographic classification as urban.
- There are likely program integrity issues within the Medicare ambulance benefit primarily focused on BLS nonemergency transports.

Therefore, the Commission makes two recommendations. These recommendations were transmitted to the Congress in November 2012, and therefore their budget impacts assume adoption of the recommendations by January 1, 2013. The first recommendation addresses the temporary add-ons and takes steps to ensure continued access, while the second recommendation focuses on program integrity.

RECOMMENDATION 7-1

The Congress should:

- **allow the three temporary ambulance add-on policies to expire;**
- **direct the Secretary to rebalance the relative values for ambulance services by lowering the relative value of basic life support nonemergency services and increasing the relative values of other ground transports. Rebalancing should be budget neutral relative to current law and maintain payments for other ground transports at their level prior to expiration of the temporary ground ambulance add-on; and**
- **direct the Secretary to replace the permanent rural short-mileage add-on for ground ambulance transports with a new budget-neutral adjustment directing increased payments to ground transports originating in geographically isolated, low-volume areas to protect access in those areas.**

RATIONALE 7-1

Allowing temporary add-ons to expire

Use of ground emergency and nonemergency ambulance transports increased steadily over the last five years, and there is no evidence of beneficiary access problems. Medicare margins appear to be adequate, and this conclusion is further confirmed by the entrance of for-

EMBARGOED FOR RELEASE UNTIL 4:00PM JUNE 11, 2013

Illustrative policy for directing payments to isolated, low-volume rural areas

An alternative to the current permanent rural short-mileage add-on policy could better target increased payments to ambulance transports originating in geographically isolated, low-volume areas. The current policy assigns extra payments to any ground ambulance claim originating in a rural ZIP code even though some of those areas are not low volume or isolated. Ideally, additional payments would be directed only to low-volume suppliers providing access in isolated areas. However, it is problematic to identify isolated low-volume suppliers and providers because these entities are mobile and can serve multiple ZIP codes ranging from urban to the most isolated. Thus, rather than looking at the location of where an ambulance is based and determining how many other providers are nearby, geographic isolation could be determined by looking at the population within a ZIP code or a defined radius around the center of the ZIP code. An area would be considered low volume based on the likelihood of that area generating less than a defined number of transports in the course of a year.

In other words, the number of expected ambulance transports would be calculated as a function of a ZIP code's population. Payment for transports in those ZIP codes could be increased if the number of expected transports met a new criterion for low volume such as the threshold of 600 transports a year across all payers, suggested by the 2012 Government Accountability Office report (Government Accountability Office 2012). In practice, the total population density could be determined for those living in the ZIP code (if the area of the ZIP code is of sufficient size) or by the count of the population residing within some set distance (e.g., 5 or 10 miles) of the center of the ZIP code. The criterion for defining low volume could be set by estimating the annual volume of transports that would cover an efficient supplier's average costs per transport in those areas.

Any area with a population below the minimum number of residents needed to generate an average number of transports that would cover the average ambulance suppliers' or providers' fixed costs would

(continued next page)

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

profit suppliers and private equity firms into the industry. Increasing Medicare spending relative to the current-law baseline, as extending any of the temporary add-ons would do, does not seem to be justified.

RVU rebalancing to protect access to emergency services

The number of BLS nonemergency transports increased faster from 2007 to 2011 than the number of ALS emergency and BLS emergency transports. A relatively small group of about 1,000 ambulance suppliers and providers billed Medicare almost exclusively for BLS nonemergency transports and account for a disproportionately large share of Medicare's claims for these services. These facts suggest that RVU weights for BLS nonemergency transports may be higher than warranted by the actual cost of providing these services. CMS should rebalance the relative values for ambulance services by lowering the relative value for BLS nonemergency services and increasing the relative values for all other ground transports. Rebalancing should be budget neutral relative to the current-law baseline and maintain payments for other ground transports at their level before expiration of the temporary ground ambulance add-on payment, which would protect access to emergency services in those areas.

To maintain payment rates for all types of transports other than BLS nonemergency at current levels, we estimate that the RVU for BLS nonemergency transports would need to be reduced by 5.7 percent and that the RVUs for all other types of ground ambulance services would need to increase by an average of 2.8 percent.

Protecting access in isolated, low-volume rural areas

The permanent add-on policy for rural ground transports cost an estimated $94 million in 2011. An alternative to the permanent add-on policy for rural ground transports, which is not well targeted under the current geographic

Illustrative policy for directing payments to isolated, low-volume rural areas (cont.)

be designated as a low-volume and isolated area, and payments for transports serving a beneficiary in those areas would be increased by some percentage. This payment increase could be either a set percentage or a per unit payment adjustment that declines as the volume of transports increases.

After determining the areas eligible for an add-on payment, the percentage increase in payments for eligible transports (i.e., the add-on percentage) could be set to calibrate this policy so that it is budget neutral to the current rural short-mileage add-on policy.

As a first estimate, we modeled a policy by identifying ZIP codes in rural areas either with a population density of 20 people per square mile or less or with a total population of 4,000 or less (in both cases including all people, Medicare and non-Medicare).[22] A population density of 20 people per square mile would generate about 600 transports per year in an area with an 8-mile radius, assuming an ambulance transport use rate of 0.15 per person per year.[23] A population of 4,000 would generate 600 transports a year under the same use rate assumption.

Under this illustrative policy, over 75 percent of rural ZIP codes would be identified as low-volume, isolated areas. (About 90 percent of the current super-rural ZIP codes would be included.) The average population for those ZIP codes included in this policy is less than 1,500. The average population for the rural ZIP codes not included is over 12,000. (A population of 10,000 would be expected to generate about 1,500 transports a year under our assumptions, more than double a low-volume threshold of 600 annual transports.)

If the approximately $94 million now used for the rural short-mileage add-on were redirected to transports originating in the low-volume, isolated ZIP codes suggested by this alternative policy, an average add-on amount of $150 to $170 per transport would result.[24] Given what we know from the Government Accountability Office's recent analysis of Medicare margins of ambulance suppliers and providers, this would likely result in positive margins for the suppliers and providers serving truly isolated, rural, low-population areas.[25] ■

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

classifications, could target increased payments to ambulance transports originating in geographically isolated, low-volume areas and redistribute the current add-on. An area would be considered low volume based on the likelihood of that area generating less than a defined number of transports in the course of a year. As a first estimate, we have modeled a policy by identifying ZIP codes in rural areas with either low population density or a small population. It would include over 75 percent of rural ZIP codes, but they would be areas with an average population of less than 1,500. Transports from isolated, low-volume areas would receive an add-on sufficient to cover their higher costs, thus ensuring access in those areas (see text box).

IMPLICATIONS 7-1

Spending

- The original estimate was budget neutral. The expiration of add-ons is current law and thus will not increase or decrease spending. The RVU rebalancing policy and the new permanent isolated, low-volume policy are both budget neutral by design. The American Taxpayer Relief Act of 2012 (ATRA) in large part extended the add-ons by one year until January 1, 2014.[26] Adoption of this recommendation by January 1, 2013, would have resulted in a very small level of savings below estimated spending under the ATRA extensions.

Beneficiary access

- Medicare beneficiaries' access to ALS and emergency transports is maintained, especially access to ambulance transports in isolated areas with low population density.

Quality

- No implications.

Delivery system reform

- No implications.

Program integrity

The Commission finds that BLS nonemergency dialysis-related transports appear to be excessive in some states and potentially fraudulent.

- The number of these transports has increased rapidly in recent years, about twice as fast as all other ambulance transports.
- There is tremendous variation across states in the use of, and in Medicare spending on, dialysis-related ambulance transports.
- There has been rapid entry into the program of for-profit suppliers concentrating on BLS nonemergency transports, particularly dialysis-related transports.
- OIG has prosecuted cases of fraudulent claims involving dialysis-related ambulance claims.

The problem of rapid growth and inappropriate use of BLS nonemergency transports is not confined to dialysis transports. OIG has also questioned the use of transports to community mental health centers for partial hospitalizations (Langford 2011).

RECOMMENDATION 7-2

The Congress should direct the Secretary to:

- **promulgate national guidelines to more precisely define medical necessity requirements for both emergency and nonemergency (recurring and nonrecurring) ground ambulance transport services;**
- **develop a set of national edits based on those guidelines to be used by all claims processors; and**
- **identify geographic areas and/or ambulance suppliers and providers that display aberrant patterns of use, and use statutory authority to address clinically inappropriate use of basic life support nonemergency ground ambulance transports.**

RATIONALE 7-2

The rapid growth and unwarranted variation in spending on BLS nonemergency transports such as those to dialysis facilities, and the OIG finding that many transports are not medically necessary, must be addressed. As a first step, the Secretary should more clearly define and articulate guidelines under which any nonemergency ambulance transport would be covered as well as precisely define the terms recurring and nonrecurring transports so that there is no ambiguity about medical necessity. Once clear guidelines have been specified, the Secretary should require MACs to use uniform and complete prepayment edits to review claims and direct the recovery audit contractors to expand their audits to include the medical necessity of Medicare Part B BLS nonemergency ambulance transports.

The Secretary should also regularly and periodically review all nonemergency ambulance claims, search for unusual use patterns, rapidly implement administrative safeguards, and apply existing legal authorities to eliminate any identified excessive and fraudulent use. The Secretary could enhance physician certification requirements. If these steps are not enough to curb clinically inappropriate and fraudulent use of ambulance transports to dialysis facilities and other nonemergency treatment settings, the Secretary could request additional authority from the Congress as needed to implement techniques such as prior authorization.

If there are concerns about the availability of transport to dialysis treatment, an approach other than using ambulance transport is needed. One possibility would involve dialysis facilities providing local transportation services to their patients. Currently, the provision of complimentary local transportation can implicate the anti-kickback statute (42 U.S.C. Section 1320a-7b(b)) and the civil money penalty law prohibiting inducements to Medicare and Medicaid beneficiaries (42 U.S.C. Section 1320a-7a(a)(5)).[27] If exceptions to these laws were created, facilities might find more efficient and clinically appropriate ways to transport patients to dialysis facilities than ambulance transportation services. However, this policy would not require dialysis facilities to provide transportation services, nor would this policy increase the Medicare bundled payment for dialysis facilities. The costs of providing nonemergency medical transportation would not be allowable in calculating the bundled payment for end-stage renal disease. This policy instead would create certain legal exceptions that enable dialysis facilities to provide this service if beneficiaries were experiencing difficulty accessing transportation to or from their dialysis treatments. Dialysis facilities may have both a quality-of-care and a financial incentive to provide transportation to their dialyzing patients. For example, one incentive would be to ensure that patients do not experience declines in health status from missing dialysis sessions because of a lack of transportation to and from the dialysis facility. Another incentive would be to ensure that patients arrive on schedule for their dialysis treatments, allowing facilities to be used more efficiently.

EMBARGOED FOR RELEASE UNTIL 12:01AM JUNE 14, 2013

Dialysis facilities might also seek a competitive advantage by offering free transportation services to patients.

We estimate that the Medicare program could save about $150 million a year if ambulance spending per dialysis beneficiary in high-use states could be brought down to the level of spending in the state at the 75th percentile of spending and $460 million if spending per dialysis beneficiary in high-use states could be brought down to the level of spending in the state at the 50th percentile of spending.

IMPLICATIONS 7-2

Spending

- Reducing clinically inappropriate use of BLS nonemergency services should result in program savings.

Beneficiary access

- Access to appropriate ambulance services would be maintained.

Quality

- No implications.

Delivery system reform

- No implications. ■

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Endnotes

1 As part of Medicare Part B, ambulance services follow the Part B calendar year rather than the federal fiscal year. Throughout this chapter, we use the Part B calendar year when referring to claims volume or spending in a given year.

2 To gather descriptive information about noninstitutional ambulance providers, we used data from the Census Bureau's County Business Patterns data set because CMS does not maintain a comprehensive data set of noninstitutional suppliers that identifies the basic descriptive characteristics of suppliers, such as ownership status and location. The Census Bureau's County Business Patterns data set includes nonprofit suppliers and for-profit suppliers but not government-owned suppliers. We used data from the CMS Provider of Services file to gather descriptive information about institution-based providers.

3 The Census Bureau's for-profit category for ambulance suppliers includes corporations, S corporations, sole proprietorships, and partnerships. The remaining 5,680 suppliers billing Medicare in 2010, or 53 percent of suppliers, were likely government entities or other suppliers affiliated with government entities. This estimate was calculated by subtracting the number of nonprofit and for-profit suppliers, as determined by the Census Bureau, from the number of all suppliers billing Medicare, as determined by Medicare claims data. In addition to government suppliers, this group may include nonprofit suppliers staffed only by volunteers, because Census Bureau data track nongovernment suppliers with paid staff. However, this also could be an undercount of government-owned suppliers, because many government suppliers do not bill Medicare for services provided to Medicare beneficiaries.

4 The proportions estimated through the combination of Medicare claims data and supplier counts from the Census Bureau are largely consistent with ambulance industry analyses conducted by the Government Accountability Office (Government Accountability Office 2007) and for the *Journal of Emergency Medical Services* (Williams and Ragone 2010).

5 Medicare's 72-hour rule stipulates that all services provided to a Medicare beneficiary within the 72-hour window before the beneficiary's inpatient hospital admission are considered a part of that inpatient admission and should be incorporated in the inpatient hospital Medicare severity–diagnosis related group claim.

6 Those conditions include when a beneficiary is transported from a SNF to a hospital for the specific purpose of receiving emergency services or outpatient medical services not available at the SNF; from the SNF to a dialysis facility for SNF residents with end-stage renal disease; or between allowed destinations during a Part A–covered stay, such as to a SNF from an inpatient hospital, to the beneficiary's home from a SNF following a SNF stay, or to a hospital from a SNF for an admission to the hospital.

7 Calls for emergency ambulance services may come to the local emergency medical services 911 service or to the ambulance supplier or provider directly. In both cases, the appropriate level of response is determined by local emergency medical services protocols or by ambulance staff when they arrive at the beneficiary's location and assess the beneficiary's condition.

8 Throughout this chapter, we refer to nonemergency ambulance transports as being recurring or nonrecurring in nature. The United States Code of Federal Regulations (CFR), at 42 CFR CH. IV Section 410.40, refers to the same transports as being repetitive or nonrepetitive.

9 Medicare beneficiaries served by an ambulance entity owned or operated by a critical access hospital may be responsible for more than 20 percent of the Medicare-approved amount for that service because these providers are reimbursed on the basis of reasonable cost, rather than paid under the fee schedule. For a critical access hospital to be eligible for reasonable cost ambulance reimbursement, the entity must be the only supplier or provider of ambulance services within a 35-mile drive of that entity.

10 The GAF applies to 70 percent of the base payment for ground ambulance transports and 50 percent of the payment for air ambulance transports.

11 The GPCI is an index that reflects the relative costs of certain components of a physician's cost of doing business (e.g., employee salaries, rent, and miscellaneous expenses) in one area of the country compared with the national average.

12 The Goldsmith modification establishes an operational definition of rural areas within large counties that contain one or more metropolitan areas. The Goldsmith areas are so isolated by distance or physical features that they are more rural than urban in character and lack easy geographic access to health services.

13 To identify an appropriate add-on percentage for this policy, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 mandated that CMS estimate the average cost per trip in the lowest quartile (25th percentile) of a rural population arrayed by population density compared with the estimate of the average cost per trip in the highest quartile (75th percentile) of a rural population arrayed by population density. CMS used cost data reported by 421

EMBARGOED FOR RELEASE UNTIL 10PM JUNE 14, 2013

ambulance providers and suppliers from the 1999 National Survey of Ambulance Providers, conducted by the Project HOPE Center for Health Affairs under the sponsorship of the American Ambulance Association (Centers for Medicare & Medicaid Services 2004). These data represent fiscal year 1998 costs. CMS used these data to predict the average cost per transport controlling for provider transport volume per year and service mix (ALS vs. BLS). CMS compared the difference between the predicted average costs per transport for every transport in rural areas with the lowest quartile of rural population arrayed by population density to every transport in rural areas with the highest quartile of rural population arrayed by population density. The result was that the average cost per trip in the lowest quartile was 22.6 percent higher than the average cost per transport in the highest quartile.

14 With the exception of urban areas that were previously identified as rural and therefore qualify for the rural air grandfathered add-on policy, urban air ambulance transport is the only type of service that does not receive an add-on payment under the Medicare ambulance fee schedule. There were approximately 24,000 Medicare urban air transports in 2011.

15 Some of the growth in Medicare claims for ambulance transports may reflect an increase in the number of municipalities billing Medicare for ambulance services that had not done so previously. A claim may include more than one transport.

16 The term Medicare dialysis beneficiaries refers to those Medicare beneficiaries with end-stage renal disease who were actively receiving dialysis treatment in the year in question. Therefore, kidney transplant beneficiaries with end-stage renal disease are not included in our definition of Medicare dialysis beneficiaries.

17 We chose to use data from the USRDS rather than Medicare claims data because the USRDS is weighted to account for the number of months beneficiaries were actively on dialysis, which USRDS refers to as spending per beneficiary hemodialysis year. This weighting mechanism accounts for partial years a beneficiary might be on dialysis due to circumstances such as death or mid-calendar year enrollment.

18 As of August 2012, Trailblazer is no longer the MAC for the state of Texas. The current MAC for the state of Texas is Novitas Solutions (formerly Highmark Medical Services).

19 It is possible that broadly collected and consistently reported cost report data from ambulance suppliers and providers could help address the issues raised in this report. The American Taxpayer Relief Act of 2012 mandated that the Secretary of Health and Human Services conduct a study that analyzes data on existing cost reports for ambulance services furnished by hospitals and critical access hospitals and conduct a study of the feasibility of obtaining cost data on a periodic basis from all ambulance suppliers and providers.

20 The GAO sample was designed to be representative of the population of ground ambulance suppliers that billed Medicare in both 2003 and 2010, were still operational in 2012, and did not share costs with nonambulance services or air ambulance services (an estimated 2,900 suppliers or about 26 percent of the ambulance industry in 2010). The GAO sample included 153 suppliers and providers. Our research finds that the universe of suppliers and providers has changed since 2003 with the entry of more for-profit suppliers and the exit of institution-based providers. Hence, the GAO sample does not include any of the new for-profit suppliers focusing on BLS nonemergency transports.

21 GAO identified several characteristics of ambulance suppliers as either contributing to statistically significant differences in total cost per transport or not. The characteristics of suppliers that GAO identified as contributing to differences in total costs per transport included the volume of transports provided by the supplier, the intensity of Medicare transports provided, and the level of government subsidies received. The characteristics of suppliers that GAO identified as not contributing to differences in total costs per transport included service area, the service mix of Medicare transports, the use of volunteer staff, and type of ownership.

22 Because we needed the population of each area, we used ZIP code tabulation areas (ZCTAs) as the unit of analysis rather than ZIP codes. ZCTAs are areas defined by the Census Bureau. They are assigned the ZIP code of the predominant ZIP code in the area. Some ZIP codes are not the predominant ZIP code in any ZCTA and hence are not assigned. CMS uses ZIP codes in payments for ambulance services. The ZIP codes in rural areas not assigned to ZCTAs account for less than 2 percent of claims in rural areas.

23 The Medicare population rate of transport is about 0.44 per person per year. We are assuming that the non-Medicare population generates a lower number as suggested by data from the Department of Transportation. Assuming 15 percent of the population is in Medicare, we estimate a transport rate of 0.15 per person per year for the total population.

24 The lower bound assumes claims in all rural ZIP codes not identified as ZCTAs are included in the policy.

25 GAO found that, in its sample, Medicare margins were 2.9 percent for providers serving predominantly rural areas and 0.3 percent with the temporary add-ons for those serving predominantly super-rural areas (Government Accountability Office 2012). Because the add-on under our new policy would be greater than the temporary add-ons, margins presumably would be positive, all else being equal.

EMBARGOED FOR RELEASE UNTIL 10AM JUNE 11, 2013

26 The American Taxpayer Relief Act of 2012 (ATRA) extended both the temporary ground ambulance add-on payment policy and the temporary super-rural add-on payment policy until January 1, 2014, and extended the temporary air transport rural grandfathering add-on payment policy for half of 2013, until June 30, 2013. In addition, ATRA included a payment adjustment for nonemergency ambulance transports for beneficiaries with end-stage renal disease, which will reduce the fee schedule amount for these services by 10 percent, beginning October 1, 2013.

27 The anti-kickback statute prohibits the offer of payment (as well as the solicitation or receipt of payment) or remuneration "in cash or in kind" to any person to induce such person to purchase any service or item for which payment may be made in whole or in part under a federal health care program. The civil money penalty law provides for financial penalties for offering or transferring remuneration to Medicare or Medicaid beneficiaries, if the offeror or transferor knows or should know that the remuneration is likely to influence the beneficiary to order or receive items or services for which payment may be made by Medicare or Medicaid. Transportation services valued at no more than $10 per trip and $50 per patient in the aggregate on an annual basis is permissible under the civil money penalty law.

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

References

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2004. Medicare program; Medicare ambulance MMS temporary rate increases beginning July 1, 2004. Interim final rule. *Federal Register* 69, no. 126 (July 1): 40288–40292.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2002. Medicare program; fee schedule for payment of ambulance services and revisions to the physician certification requirements for coverage of nonemergency ambulance services. Final rule with comment period. *Federal Register* 67, no. 39 (February 27): 9100–9135.

De La Merced, M. J. 2011. Emergency Medical agrees to buyout. *The New York Times*, February 15.

Falck A/S. 2011. *2011 annual report*. Copenhagen, Denmark: Falck. http://www.falck.com/SiteCollectionDocuments/Annual%20reports/Falck%20Annual%20Report%202011.pdf.

Government Accountability Office. 2012. *Ambulance providers: Costs and Medicare margins varied widely; transports of beneficiaries have increased.* GAO–13–6. Washington, DC: GAO.

Government Accountability Office. 2007. *Ambulance providers: Costs and expected Medicare margins vary greatly.* GAO–07–383. Washington, DC: GAO.

Government Accountability Office. 2003. *Ambulance services: Medicare payments can be better targeted to trips in less densely populated rural areas*. GAO–03–986. Washington, DC: GAO.

Langford, T. 2011. Medicare dollars mean payday for clinics. *Houston Chronicle*, October 16.

McCallion, T. 2011a. Ambulance companies change hands. *Journal of Emergency Medical Services*, May 18.

McCallion, T. 2011b. Pinnacle session discusses new wave of EMS consolidation. *Journal of Emergency Medical Services*, August 2.

Office of Inspector General, Department of Health and Human Services. 2011. *HHS OIG semiannual report to Congress: Fall 2011*. Washington, DC: OIG.

Office of Inspector General, Department of Health and Human Services. 2006. *Medicare payments for ambulance transports*. OEI-05-02-00590. Washington, DC: OIG.

Snyder, S. 2011. *Ambulance services in the US.* IBISWorld industry report 62191. Los Angeles, CA: IBISWorld.

Williams, D. M., and M. Ragone. 2010. 2009 JEMS 200-city survey. Zeroing in on what matters. *Journal of Emergency Medical Systems* 35, no. 2 (February): 38–42.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

CHAPTER 8

Mandated report: Geographic adjustment of payments for the work of physicians and other health professionals

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

RECOMMENDATION

8 Medicare payments for work under the fee schedule for physicians and other health professionals should be geographically adjusted. The adjustment should reflect geographic differences across labor markets for physicians and other health professionals. The Congress should allow the geographic practice cost index (GPCI) floor to expire per current law and, because of uncertainty in the data, should adjust payments for the work of physicians and other health professionals only by the current one-quarter GPCI and direct the Secretary to develop an adjuster to replace it.

COMMISSIONER VOTES: YES 15 • NO 2 • NOT VOTING 0 • ABSENT 0

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

CHAPTER 8

Mandated report: Geographic adjustment of payments for the work of physicians and other health professionals

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Chapter summary

The Middle Class Tax Relief and Job Creation Act of 2012 mandated that the Commission consider whether Medicare's fee schedule for physicians and other health professionals should include an adjustment to reflect geographic variation in the cost of these professionals' labor. The fee schedule includes geographic practice cost indexes (GPCIs) that adjust payment rates for costs such as rent and office staff wages that vary depending on the geographic area in which a service is furnished. However, arguments for and against one of the GPCIs—the GPCI for the work effort of the physician or other health professional—have persisted since the development of the fee schedule in the 1980s. The Congress has directed the Commission to consider whether there should be a work GPCI and, if so, what the level of the GPCI should be and where it should be applied. The Commission must also assess the impact of the current work GPCI, including its effect on access to care. Because a statutory provision of the GPCI was scheduled to expire at the end of 2012, the Commission issued a recommendation to the Congress in November 2012. The information and recommendation in this report are based on available information and decisions made at that time.

The work GPCI is one of three geographic payment indexes. The other two are for practice expense and professional liability insurance. Together, they adjust payments for resource costs that are beyond providers' control and that vary geographically.

In this chapter

- Introduction
- Arguments for and against the work GPCI
- Empirical analysis of the work GPCI's validity and its effects on access and spending
- Recommendation

The chief argument made in favor of a work GPCI is that the cost of living varies across areas. If payment rates for fee schedule services are not adjusted with a work GPCI, the supply of physicians and other health professionals might not be sufficient in high-cost areas and beneficiary access to care in those areas could suffer.

The chief argument against a work GPCI is one of equity. That is, the work of physicians and other health professionals is the same in all areas, so why should that work be paid for differently across areas? A related argument against the GPCI is that practices recruiting physicians and other health professionals compete in a labor market that is national, so payment rates should be uniform. Still others cite the extra demands or costs of rural practice, such as greater on-call time and travel, and assert that physicians and other health professionals must be paid more to locate in rural areas. By contrast, the work GPCI tends to lower payment rates in rural areas instead of raising them.

Another argument made against the work GPCI is that the data used to construct it are flawed. The GPCI is based on earnings data for professionals in certain reference occupations, such as architects and engineers. Such data are used instead of data on physicians' earnings themselves because of the conceptual and technical difficulties involved in directly observing earnings. Conceptually, differences across practices in return on investment (profitability of practices), geographic variation in the volume of services provided under fee-for-service (FFS) payments, and the market concentration of insurers or providers limit the usefulness of data on physician earnings for creating an index. Technically, available data are capped at some maximum earnings value, include data on the earnings of medical residents, or often have very small sample sizes—all of which limit their usefulness. In addition, if data on the earnings of physicians and other health professionals were used to construct the work GPCI, there would be a circular relationship between the work GPCI and the data used to construct it. Further, some who oppose the work GPCI say that the labor market for physicians and other health professionals is different from that for professionals in the reference occupations, which makes the GPCI inaccurate.

Concerns about the work GPCI have led the Congress to put constraints on it. First, the GPCI is limited to one-quarter of the relative cost of professional work effort in a locality compared with the national average, which means that three-quarters of the payment for work effort is not adjusted by the GPCI. Second, the GPCI has a temporary floor that suspends it in localities with costs below the national average. The floor was to have expired at the end of 2012. It is now due to expire at the end of 2013.

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

To evaluate the work GPCI, we considered its effect on program spending and quality of care, as well as its potential to improve beneficiaries' access to care. We also considered whether any change in the GPCI had the potential to advance payment reform—that is, move Medicare payment policy away from FFS payment and encourage a more integrated delivery system.

The Commission's findings are, first, that there is evidence of the need for some level of geographic adjustment of fee schedule payments for professional work. Cost of living varies geographically. Earnings vary geographically for the professionals in the work GPCI's reference occupations. To the extent that we can measure geographic variation in physicians' earnings, those earnings vary.

However, the current GPCI is flawed in concept and implementation. Conceptually, it is based on the earnings of professionals in the reference occupations, but the labor market for those professionals may not resemble the labor market for physicians and other health professionals. Implementation of the work GPCI is flawed because there appear to be no sources of data on the earnings of physicians and other professionals of sufficient quality to validate the GPCI.

While the work GPCI is flawed, it is not so flawed as to warrant an immediate change in current law. Under current law, one-quarter of the GPCI is applied to all localities and the GPCI floor expires. There are no data to establish a new index in the short run. We are unable to determine whether the work GPCI has an effect on the quality of care, but there is no evidence that the GPCI affects access. Moreover, any access concerns are better addressed through other targeted policies, such as the health professional shortage area bonus and the primary care bonus. Extension of the GPCI floor would increase Medicare spending. Other departures from current law would redistribute payments among localities without evidence of an effect on access or equity.

The Congress has recognized the limitations and measurement difficulties of the work GPCI. Therefore, in light of the need for some geographic adjustment, but recognizing that there are insufficient data in the short run to revise the work GPCI, the Commission recommends that Medicare payments for the work effort of physicians and other health professionals be geographically adjusted. The adjustment should reflect geographic differences in labor cost per unit of output across the markets for physicians and other health professionals. Further, the Congress should allow the GPCI floor to expire as current law requires, adjust payments for the work of physicians and other health professionals only by the current one-quarter GPCI (because of uncertainty in the data), and direct the Secretary to develop an adjuster to replace it. ■

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

Section 3004 of the Middle Class Tax Relief and Job Creation Act of 2012

(b) Report.—Not later than June 15, 2013, the Medicare Payment Advisory Commission shall submit to the Committees on Ways and Means and Energy and Commerce of the House of Representatives and the Committee on Finance of the Senate a report that assesses whether any adjustment under section 1848 of the Social Security Act to distinguish the difference in work effort by geographic area is appropriate and, if so, what that level should be and where it should be applied. The report shall also assess the impact of the work geographic adjustment under such section, including the extent to which the floor on such adjustment impacts access to care. ■

Introduction

Section 3004 of the Middle Class Tax Relief and Job Creation Act of 2012 required the Commission to consider whether Medicare's physician fee schedule should have a payment adjustment for the work effort of physicians and other health professionals and, if so, what the level of the geographic practice cost index (GPCI) should be and where it should be applied (see text box). The Commission was also directed to assess the impact of the current work GPCI, including its effect on access to care. Because a statutory provision on the GPCI was scheduled to expire at the end of 2012, the Commission issued a recommendation to the Congress in November 2012. The recommendation and supporting evidence presented here are based on available information and decisions made at that time.

To evaluate the work GPCI, we considered its effect on program spending and quality of care as well as its potential to improve beneficiaries' access to care. We also considered whether any change in the GPCI had the potential to advance payment reform—that is, move Medicare payment policy away from fee-for-service (FFS) payment and encourage a more integrated delivery system.

Physician fee schedule's three GPCIs

The current adjustment for work effort is one of the fee schedule's three GPCIs. In addition to the work GPCI, there are GPCIs for practice expense and professional liability insurance (PLI). The practice expense GPCI is an adjustment for costs such as rent and staff wages that are incurred in operating a medical practice and known to vary geographically. The PLI GPCI is an adjustment for the premiums that physicians and other health professionals pay for that type of insurance. The GPCIs scale base payments up or down depending on whether an area's input prices are higher or lower than the national average (Table 8-1).[1]

The geographic payment adjusters in Medicare's FFS payment systems are intended to adjust payments for costs that are beyond providers' control. In the late 1980s, a contractor working for CMS identified the costs relevant to the work GPCI as an area's cost of living adjusted for the area's amenities (Pope et al. 1989). Thus, the GPCI would account for housing, food, and other costs specific to an area but would also be influenced by the area's amenities. Amenities could include professional factors, such as access to quality colleagues, and personal factors, such as availability of good schools (Zuckerman and Maxwell 2004).

TABLE 8–1 **Example: Geographic adjustment of RVUs with GPCIs**

Service: Midlevel office visit, established patient
Locality: Los Angeles, 2012

Input	Unadjusted RVU		GPCI		Adjusted RVU
Physician work	0.97	×	1.04	=	1.00
Practice expense	1.03	×	1.15	=	1.19
PLI	0.07	×	0.64	=	0.04
	2.07				2.23
			Conversion factor		× 34.04
			Payment rate		$75.91

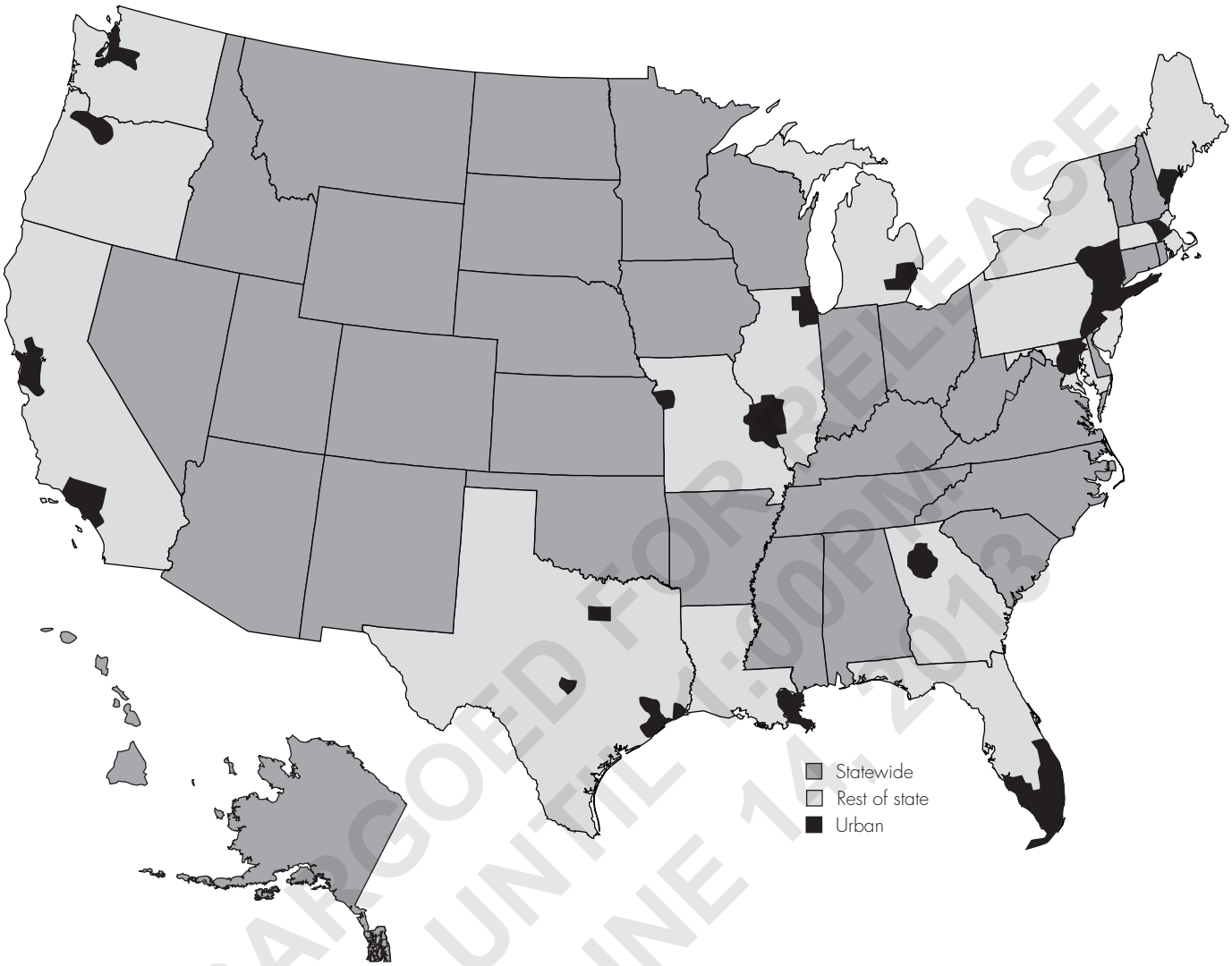
Note: RVU (relative value unit), GPCI (geographic practice cost index), PLI (professional liability insurance). Results calculated with formulas shown may not equal amounts in table due to rounding.

Source: CMS GPCI file for 2012 (released before extension of temporary floor) and RVU file.

EMBARGOED FOR RELEASE UNTIL 12PM JUNE 14, 2013

FIGURE 8–1

GPCI payment localities under the Medicare fee schedule for physicians and other health professionals, 2012



EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Note: GPCI (geographic practice cost index). Some urban areas include more than one locality.

Source: Final GPCI county data file from CMS for 2012.

Payment areas

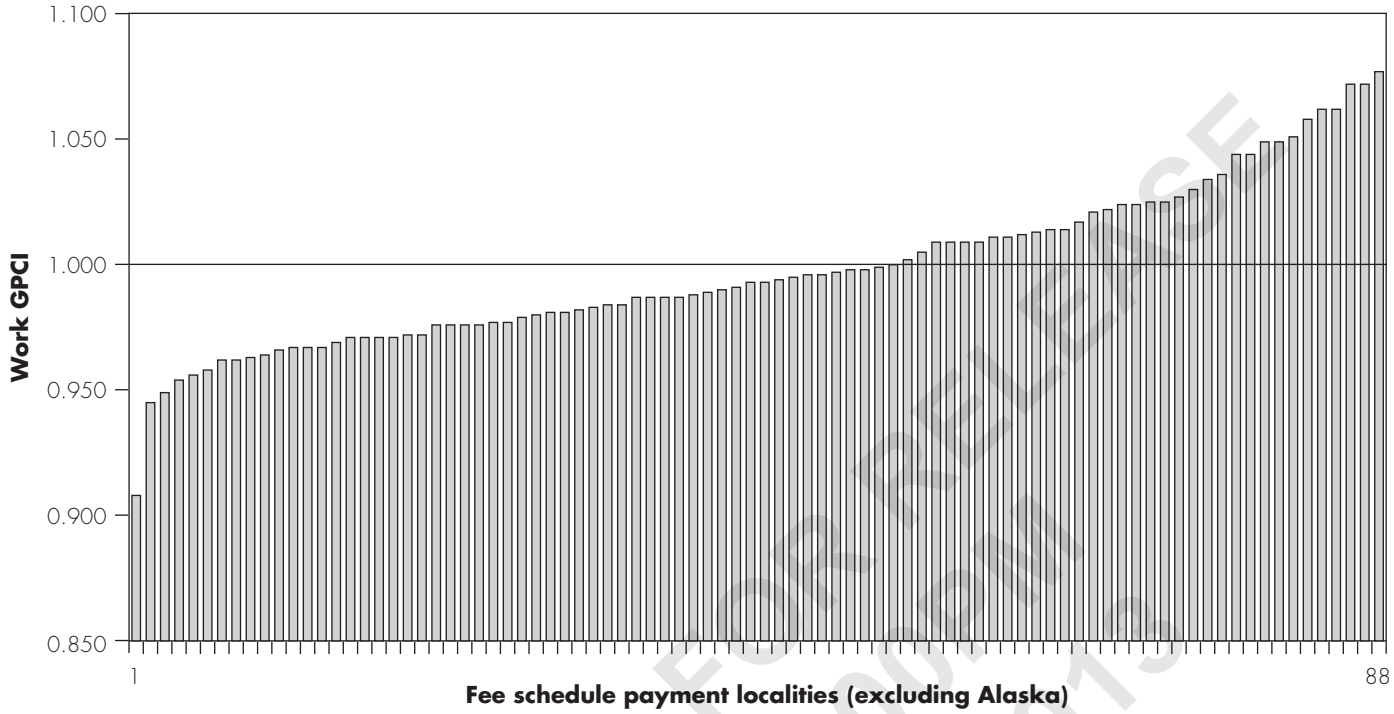
The payment areas for the GPCIs are called localities. CMS has defined 89 of them (Figure 8-1). Thirty-four localities cover entire states. Other states have more than one locality. For example, Pennsylvania has two: The Philadelphia metropolitan area is one locality, and the rest of the state is another. The Commission has considered alternative methods for reconfiguring the localities (text box, p. 208). In addition, the Government Accountability Office, the Institute of Medicine (IOM), and others have called for redrawing the locality boundaries.

Work GPCI's range of values

In the absence of a floor, the work GPCI can have a range of values (Figure 8-2). The national average is 1.000. Without the floor, the work GPCI for Puerto Rico is lowest, at 0.908. The locality with the next lowest work GPCI is Montana, at 0.945. At the other end of the scale, Alaska has a work GPCI of 1.500 specified in statute (not

FIGURE 8–2

Work GPCI by locality, 2012



Note: GPCI (geographic practice cost index). There are 89 payment localities. The Alaska locality is not shown. Its work GPCI (established in the Medicare Improvements for Patients and Providers Act of 2008) is 1.5. GPCI values shown are those without the floor.

Source: 2012 GPCI file (released before extension of the temporary floor).

EMBARGOED FOR RELEASE UNTIL 1:00 PM JUNE 14, 2013

shown in the figure). Otherwise, Santa Clara, California, has the highest work GPCI, at 1.077.

Given the value of the work GPCI in each locality and the locality's volume of services (measured in relative value units), we can estimate the GPCI's effect on spending relative to spending in the absence of a GPCI. The work GPCI (not including Puerto Rico) generally has effects on a locality's allowed charges that range from −2.9 percent to 3.8 percent (Figure 8-3, p. 204).

The work GPCI's temporary floor—established initially in the Medicare Modernization Act of 2003 and continued with a series of extensions since then—suspends the adjustment in localities with costs below the national average. That is, if a locality's GPCI would be less than 1.000 without the floor (e.g., 0.950), the locality's GPCI becomes 1.000 with the floor. Because of the floor, the GPCI's effect on spending is limited to the 34 localities with above-average costs (Figure 8-4, p. 205).

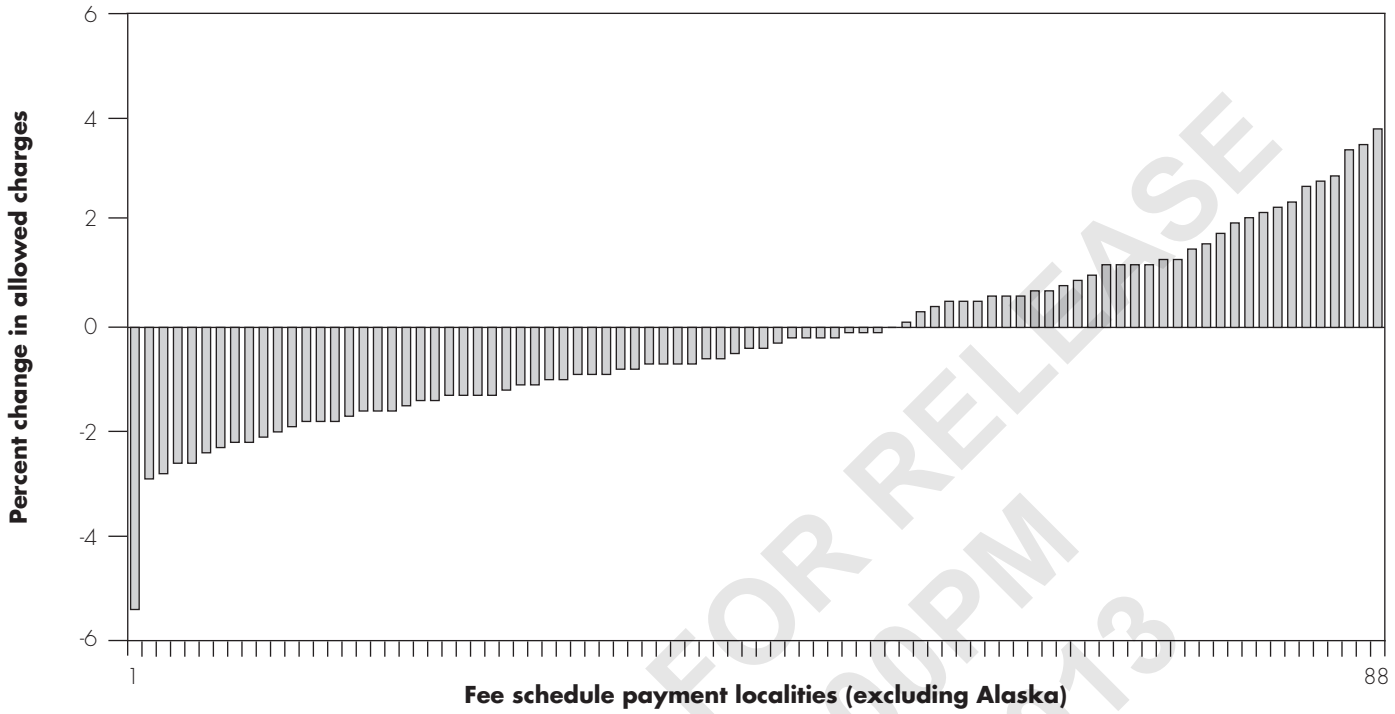
Construction of the work GPCI

The work GPCI is constructed using data on the earnings of professionals in selected occupations. Specifically, CMS develops the work GPCI with Bureau of Labor Statistics (BLS) data on the earnings of professionals in seven reference occupational categories: architecture and engineering; computer, mathematical, life, and physical science; social science, community and social service, and legal; education, training, and library; registered nurses; pharmacists; and art, design, entertainment, sports, and media.

When new BLS data from the Occupational Employment Statistics survey become available, the GPCI is updated (Figure 8-5, p. 206). By statute, the updates occur at least every three years. A budget-neutrality adjustment is applied to ensure that an update does not change total payments. Work GPCI updates include the application of a statutory limit that reduces variation in the GPCI to 25 percent of what it would be otherwise.

FIGURE 8–3

Work GPCI effects (without floor) on total fee schedule allowed charges by locality, 2012



Note: GPCI (geographic practice cost index). Effects were calculated—holding the volume of services constant—as allowed charges with the work GPCI (and no floor) compared with allowed charges without the work GPCI. There are 89 payment localities. Alaska is not shown. The legislated work GPCI for Alaska increases the state's payments for work by 25.6 percent.

Source: Final GPCI county data file from CMS for 2012 and GPCI file (released before extension of the temporary floor) for 2012.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 11, 2013

The work GPCI is not based on the earnings of physicians and other health professionals (except for registered nurses and pharmacists) for several reasons.

Circularity

CMS cites circularity as one reason for constructing the work GPCI with data on the earnings of professionals in the reference occupations (Centers for Medicare & Medicaid Services 2012). Medicare payments are a key determinant of the earnings of physicians and other health professionals. Including those earnings in the GPCI would effectively make the index dependent on Medicare payments.

This concern about circularity is an issue the Commission considered when making recommendations on an alternative method to compute the hospital wage index (Medicare Payment Advisory Commission 2007). For example, if a hospital's wage index is determined by the wages it pays, success in moderating increases in hourly wages could lead to a decrease in the facility's wage index and therefore pressure to reduce costs even more. In the case of the work GPCI, such a circular relationship could arise if the GPCI were based on the earnings of health professionals: A change in the GPCI would lead to a change in earnings, which in turn would lead to further changes in the GPCI, and so on.

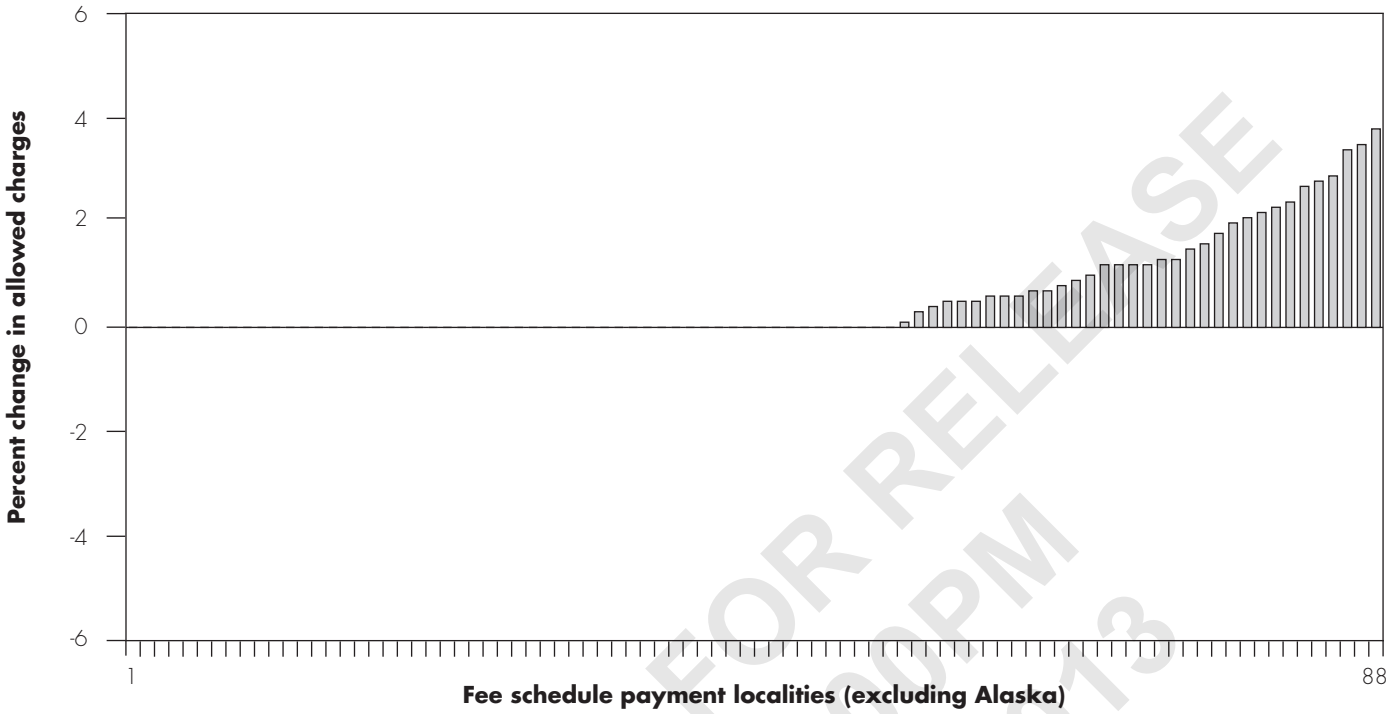
Return on investment

CMS notes also that the earnings of physicians and other health professionals can have two components: wages and a return on investment. Calculating the work GPCI with data on those earnings would assign higher GPCI values to areas where practices are more profitable.

In a report on geographic adjustment of Medicare payments, IOM notes that health professionals who are self-employed have an ownership interest in their practice

FIGURE 8–4

Work GPCI effects (with floor) on total fee schedule allowed charges by locality, 2012



Note: GPCI (geographic practice cost index). Effects were calculated—holding the volume of services constant—as allowed charges with the work GPCI (including the floor) compared with allowed charges without the work GPCI. There are 89 payment localities. Alaska is not shown.

Source: Final GPCI county data file from CMS for 2012 and GPCI file (released before extension of the temporary floor) for 2012.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

(Institute of Medicine 2011). In turn, their earnings include compensation for furnishing services but often also include a partial salary that represents a return on investment in the practice. IOM concluded that, with so many variations in staffing arrangements among practices, earnings data may not accurately represent the income health professionals derive from furnishing services.

Volume of services

The Government Accountability Office, in a report on the validity of the GPCIs, offered an additional reason for the work GPCI not to be based on the earnings of physicians and other health professionals: geographic variation in the volume of services (Government Accountability Office 2005). The earnings of physicians and other health professionals are partly a function of the volume of services they furnish. Indeed, the Commission is among those who have documented variation in the volume of services (Medicare Payment Advisory Commission 2011b). If the work GPCI were based on the earnings of physicians and other health professionals, it would be higher in high-volume areas and lower in low-volume areas.

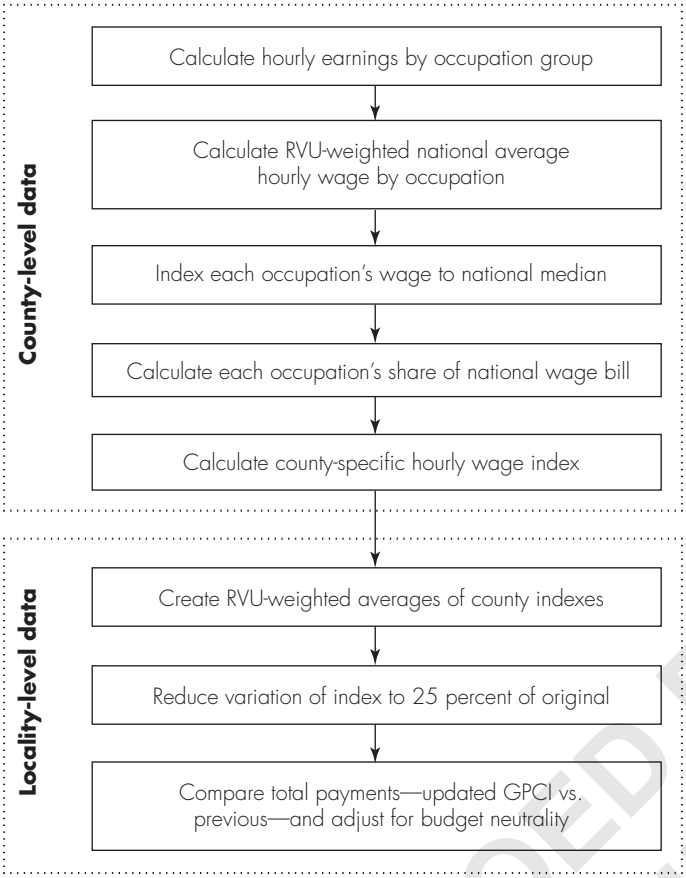
Market factors

Market factors would be one further consideration if the work GPCI were constructed using data on the earnings of physicians and other health professionals. In work for the Commission, a contractor noted that in some geographic areas health professionals have a strong bargaining position relative to insurers (Dalton et al. 2012). As a result, the health professionals can command higher payments, which may be an important determinant of earnings in some areas.

Limits on the work GPCI

Whether there should be a work GPCI is a longstanding question. When the Congress first considered legislation

FIGURE 8–5 **Updating the work GPCI**



Note: GPCI (geographic practice cost index), RVU (relative value unit).

Source: Acumen LLC, final report on sixth GPCI update, November 2010.

for the fee schedule in the late 1980s, there were two concerns about a geographic adjustment for work: equity—for beneficiaries and the professionals furnishing services—and ensuring access to care in areas less desirable to professionals (Ginsburg 1991, Physician Payment Review Commission 1989). Because of these concerns, the Physician Payment Review Commission recommended that the fee schedule not include a work GPCI.

In response to these concerns, the Congress put limits on the work GPCI. First, the fee schedule legislation passed in 1989 limited the GPCI to one-quarter of the relative cost of professional work effort in a locality compared with the national average. For example, if in a given locality the earnings of professionals in the reference occupations were 20 percent above the national average, the Medicare payment adjustment under the work GPCI, instead of being 1.20, would be limited to 1.05, or 5 percent above the national average. The limit was established in response to research showing that a work GPCI without the limit would range from about 28 percent above the national average to about 16 percent below the national average, a degree of variation perceived by the Congress as too high (Zuckerman and Maxwell 2004). The second limit is the floor, which affects much of the nation (Figure 8-6). It was extended most recently with the American Taxpayer Relief Act of 2012. Without further legislation, the floor will expire at the end of 2013.

Arguments for and against the work GPCI

To examine the work GPCI in depth, the Commission contracted for a review of relevant economic theory, characteristics of the labor market for physicians and other health professionals, and arguments for and against the work GPCI.

Theory of geographic wage differences

The theory of compensating wage differentials underlies the construction of the GPCI. According to this theory, workers are compensated differentially depending on attributes of their jobs. If a job has negative attributes (noise, stress, etc.), workers are expected to demand a compensating increase in their wages. By contrast, if a job takes place in a pleasant work environment or has other positive attributes, workers likely receive a lower wage, holding other attributes constant. The GPCI results from the application of this theory to the geographic dimension of wages.

Geographic factors that can affect the nominal wage in an area are the cost of living and local amenities such as climate, cultural activities, and recreational opportunities. These factors can offset each other. For example, in high-amenity areas, employers can pay workers less relative to the cost of living than in areas with low levels of amenities. By contrast, workers may demand higher wages (adjusted for cost of living) in areas with unattractive features.

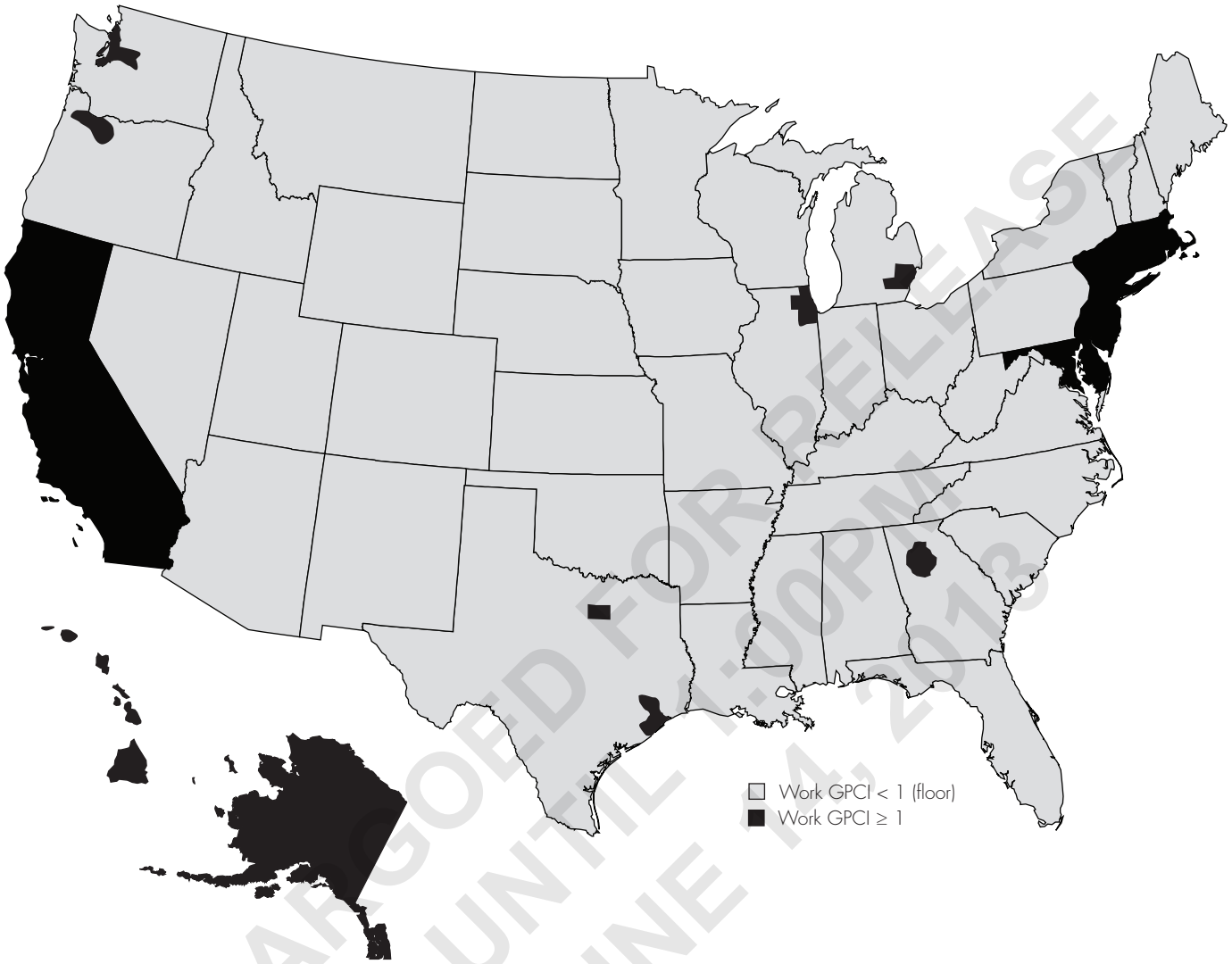
Labor market for physicians and other health professionals

In addition to factors relevant to all occupations, certain features of the labor market for physicians and other health

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

FIGURE 8–6

Floor on work GPCI affects much of the nation, 2012



EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Note: GPCI (geographic practice cost index). A temporary floor suspends the work GPCI in localities with labor costs below the national average. Some urban areas include more than one locality.

Source: Final GPCI county data file from CMS for 2012 and GPCI file (released before extension of the temporary floor) for 2012.

professionals can have effects specific to geographic differences in the earnings of those professionals. First, self-employed health professionals have earnings that may include a return on investment. The tendency of physicians and other health professionals to be self-employed (in contrast to working as an employee) can vary geographically and, therefore, can affect comparisons of physician earnings by area.

A second factor is market power. In some geographic areas, health professionals have a strong bargaining position relative to insurers. As a result, those professionals may receive higher payments for their services and those payments may in turn influence earnings in some areas relative to others.

Third, the earning potential of physicians and other health professionals can be affected by the availability of factors of production that are either complements to or substitutes for the work of health professionals. Relevant factors of production might include specialists to whom a professional can refer patients, hospitals and

Redrawing the boundaries of the fee schedule's payment localities

Several health policy bodies, including the Commission, have examined the need to redraw the physician fee schedule's payment localities. In April 2006, Commission staff presented alternative methods for reconfiguring the fee schedule's payment localities. One was called the locality option and was based on existing localities. A county was allowed to become a separate locality if its input prices were found to be high relative to the locality's other counties. The second alternative was called the metropolitan statistical area (MSA) option and was based on MSAs and "rest of state" areas as defined by the Office of Management and Budget. If an area within a state had input prices that exceeded the state's lower cost areas by a preset threshold, it was allowed to become a locality. Both options would have increased the number of localities, from the current 89 to 186 under the locality option, and to 119 under the MSA option. Nonetheless, under both options, 95 percent of counties would have a change in payments of 5 percent or less.

Separately, the Government Accountability Office (GAO) and the Institute of Medicine (IOM) have recommended redrawing the locality boundaries. GAO recommended that CMS examine and revise the localities using an approach that is uniformly applied to all states and based on the most current data (Government Accountability Office 2007). GAO found that CMS had established the current boundaries using three different approaches.

IOM recommended moving from the current 89 localities to the 441 MSAs and statewide non-MSA areas that CMS uses for payments to institutional providers (Institute of Medicine 2011). IOM's rationale was that they could find little justification for defining payment areas for the physician fee schedule differently from the payment areas for hospitals and other providers. Their simulation of the recommendation's impact showed that most of the redistribution would shift Medicare payments from rural areas to urban areas and from small urban areas to large urban areas (Institute of Medicine 2012). The changes in payments would be between −5 percent and 5 percent in counties where 96 percent of physician fee schedule services are billed.[2]

Partly in response to these recommendations, but also in response to concerns expressed by physicians and suppliers in specific geographic areas, CMS anticipates further work on the structure of localities, much of it focused on the IOM recommendation to increase the number of localities (Centers for Medicare & Medicaid Services 2012). The agency will assess and analyze the new IOM report. CMS will also provide opportunities for public input, including town hall meetings and the rulemaking process. ■

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

other institutional providers, and providers of medical technology (e.g., imaging centers). All such factors can influence the earning potential of health professionals and vary geographically in their availability.

Arguments in favor of a work GPCI

Arguments in favor of a work GPCI have been drawn from the theory of geographic wage differences, the work of the contractor who developed the GPCIs for CMS, and IOM reports on geographic adjustment of Medicare payments (Institute of Medicine 2012, Institute of Medicine 2011).

Compensation for cost of living

A fundamental argument for a work GPCI is that the cost of living varies across areas. It is a cost that is beyond the control of physicians and other health professionals. Payments for the services they furnish should be adjusted accordingly. Consistent with this theory is the notion that the adjustment should account for an area's amenities (Pope et al. 1989, Zuckerman and Maxwell 2004).

Beneficiary access to services in high-cost areas

Advocates of the work GPCI contend that if payment rates for fee schedule services do not reflect local cost of living and amenities, the supply of physicians and other health professionals will not be sufficient in high-cost areas and beneficiaries' access to care in those areas will suffer (Pope et al. 1989).

Work as an input to the production of services

The work of physicians and other health professionals is one of several inputs to the production of fee schedule

services, along with practice employees, office space, medical equipment, and so on. Those who support use of a work GPCI contend that payment for the work component of services should be adjusted just as payment for other components—practice expense and PLI—is adjusted. For example, the practice expense GPCI adjusts payments to account for geographic variation in practices' wages for clinical and administrative staff.

Consistency with Medicare payment adjustments for other providers

Another reason to adjust Medicare's payments for fee schedule services cited by advocates of the work GPCI is the labor component of Medicare payments to institutional providers, such as hospitals, which is fully adjusted through the Medicare area hospital wage index for geographic variation in costs. If hospital payments are geographically adjusted but fee schedule payments are not, variation in the two types of payments will be inconsistent.

Arguments against a work GPCI

Arguments against a work GPCI are drawn from the positions of stakeholders who argue for a floor on the GPCI if not outright elimination of it. The IOM reports addressed some of these arguments also.

Work is work, or equity

IOM reported that opponents of the work GPCI contend that "work is work" (Institute of Medicine 2011). That is, the work of physicians and other health professionals is the same in all areas, so why should that work be paid for differently across areas? Essentially, the argument is one of equity.

National labor market

Another argument against the work GPCI holds that the labor market is national rather than local. That is, practices recruiting physicians and other health professionals compete with practices nationwide (Marshfield Clinic 2002). For example, practices in rural areas with lower work GPCIs assert that they compete with urban practices, and practices in different regions compete with each other to hire health professionals. While it is understood that financial considerations are not the only factor influencing the supply decisions of physicians and other health professionals, some rural practices nonetheless see a rationale for making payment rates uniform everywhere.[3]

Demands of rural practice

Some representatives of rural practices claim that they have to pay more to hire physicians to locate in rural areas because of the extra demands or costs of rural practice, such as greater on-call time and travel (Kitchell 2011). Further, physicians and other health professionals may prefer to locate in urban areas—even more so than other occupations—because of the availability of complementary factors of production (e.g., colleagues, specialists, institutional providers, medical technology, teaching hospitals, and research opportunities), preferences for the amenities available in urban areas, and the availability of jobs for spouses. For these reasons, the argument is that, despite the lower cost of living in rural areas, physicians and other health professionals must be paid more to locate there.

Certain other government programs do not geographically adjust payments or costs

Work GPCI opponents note that not all government payments or standards are geographically adjusted. For example, Social Security payments are not geographically adjusted, nor is the federal poverty level (although the Department of Labor has conducted research on doing so).

Data for the reference professional occupations are inadequate

Work GPCI opponents argue that the wage data for the work GPCI's reference occupations—architects, engineers, and so forth—are inappropriate proxies for physicians' wages. The labor market for physicians and other health professionals may be different from that of professionals in the reference occupations. Opponents reason that if accurate data on the earnings of physicians and other health professionals are not available and if the reference data are inadequate, it may be better to have no work GPCI.

Work GPCI is inconsistent with findings on urban–rural differences in physician compensation

Another argument concerns the accuracy of the work GPCI rather than whether there should be one. Work GPCI opponents point to research on urban–rural differences in physicians' earnings (Reschovsky and Staiti 2005). Adjusted for cost of living only (and not amenities), the earnings of physicians in rural areas were found to exceed those of physicians in urban areas by a statistically

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

The Institute of Medicine's proposed analysis of geographic variation in physician compensation

The Institute of Medicine's (IOM's) committee on geographic adjustment of Medicare payments has proposed an analysis of geographic variation in physician compensation (Institute of Medicine 2011). The committee received testimony from a coalition of providers arguing that, as the number of employed physicians has increased, salary survey data have become available that can be used to directly measure physician labor costs (Reding 2010). In response, the committee first considered alternative sources of earnings data and evaluated the data according to the characteristics of sample size, response rate, representativeness, and timeliness. They reviewed data from the Bureau of Labor Statistics, the Bureau of the Census, the Medical Group Management Association, and the American Medical Association. IOM's conclusion was that, when available, data from the American Community Survey conducted by the Bureau of the Census might be appropriate.[4]

The IOM committee then proposed an analysis of geographic variation in the compensation per relative value unit of physicians and other health professionals. The analysis would be premised on the idea that, if cost of living and amenities are as important to physicians and other health professionals as they are to those in the work geographic practice cost index (GPCI) reference occupations, geographic data should show that the compensation of health professionals is highly correlated with the compensation of workers in the reference occupations. Such a finding would support use of compensation data on reference occupations in constructing the work GPCI. Alternatively, if the compensation of those in the reference occupations is not correlated with the compensation of physicians and other health professionals, such a finding would suggest that reference occupation compensation is a poor proxy for the cost of living net of amenities represented in the GPCI. ■

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 11, 2013

significant 13 percent. By contrast, the current work GPCI adjusts payments upward in urban localities.

Arguments for and against a partial work adjustment

The work GPCI adjustment is partial in that it is limited to one-quarter of the relative cost of professional work effort in a locality compared with the national average. An argument for adjusting only in part is one of caution or prudence given the limitations in available data and conceptual uncertainties. Another argument for a partial adjustment is that the preferences for amenities and, therefore, earnings of the reference occupations are likely to correlate partially, but not completely, with the preferences and earnings of physicians and other professionals. Thus, only part of the variation in reference occupation wages should be applied by the work GPCI.

Soon after inception of the fee schedule in 1992, researchers with the American Medical Association assessed the validity of GPCIs, including the work GPCI's one-quarter limit (Gillis et al. 1993). After estimating alternative statistical models designed to explain variation in physicians' compensation, they found that a model with a one-quarter GPCI fit the data better than models with either a full GPCI (no limit) or no GPCI.

The main argument against a partial work GPCI is that, if the arguments for a work GPCI are convincing, they would support a full work adjustment, not a partial one.

Empirical analysis of the work GPCI's validity and its effects on access and spending

Given the arguments for and against the work GPCI, we proceeded with an empirical analysis to address the issues in the mandate: whether to apply a work GPCI, and, if so, its effects. We worked with a contractor to develop and implement an analytic plan to investigate how well the work GPCI is correlated with a proprietary cost-of-living index, the Commission's cost-of-living index, and physicians' earnings (Dalton et al. 2012). The analysis also includes the work GPCI's effects on access to care and spending.

Empirical analysis of the work GPCI

Our analysis first considered questions specific to design in order to determine whether the work GPCI is a valid measure of geographic variation in resource costs:

- Is the work GPCI correlated with a measure of geographic variation in the cost of living?
- Is the work GPCI correlated with the hospital wage index?

Any correlations between the work GPCI and other measures of geographic variation in resource costs would reveal alternatives that could reduce CMS's administrative burden of maintaining a GPCI used solely to adjust the fee schedule's work relative value units (RVUs).

We also analyzed the correlation of earnings within the group of reference occupations, comparing each pair. If the earnings of the reference occupations are not correlated, it would raise the question of whether the earnings of some subset of the reference occupations would yield a more valid GPCI than the current one.

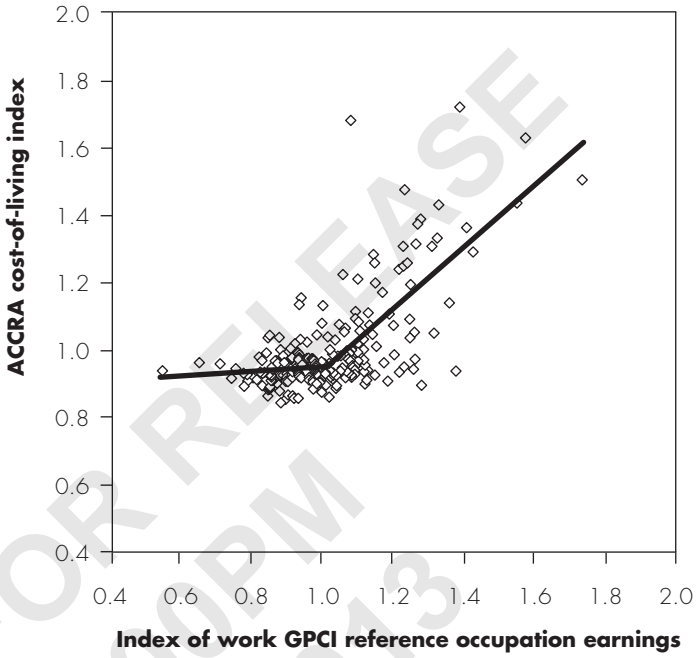
As proposed by IOM in the study of geographic adjustment of Medicare payments, we examined the correlation of the work GPCI and available data on physicians' earnings (see text box).

Correlation of the work GPCI with a proprietary cost-of-living index

To compare the work GPCI with a cost-of-living index, we used an index developed by the Council for Community and Economic Research (C2ER), formerly known as the American Chamber of Commerce Research Association (ACCRA).[5] C2ER describes its ACCRA cost-of-living index as follows:

> The ACCRA Cost of Living Index measures regional differences in the cost of consumer goods and services, excluding taxes and non-consumer expenditures, for professional and managerial households in the top income quintile. It is based on more than 50,000 prices covering almost 60 different items for which prices are collected three times a year by chambers of commerce, economic development organizations or university applied economic centers in each participating urban area. . . . The composite index is based on six components—housing, utilities, grocery items, transportation, health care and miscellaneous goods and services.[6]

FIGURE 8–7 **Correlation of ACCRA cost-of-living index and an index of earnings for the work GPCI's reference occupations**



Note: ACCRA (American Chamber of Commerce Research Association), GPCI (geographic practice cost index).

Source: MedPAC analysis and RTI International analysis of ACCRA data from 2009 to 2011 and Bureau of Labor Statistics survey data from May 2011.

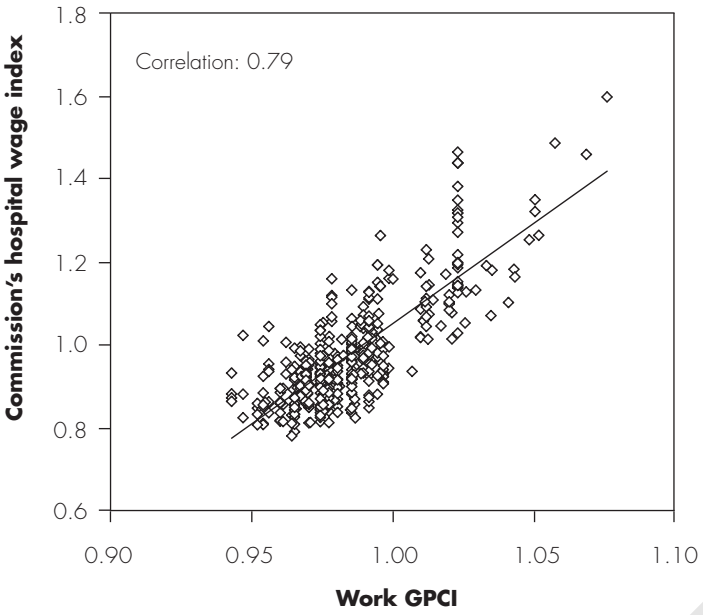
Using the ACCRA index as a measure of geographic variation in cost of living, we analyzed the correlation between that index and a second index constructed using the BLS data that were used to construct the work GPCI.

The analysis shows, first, less variation geographically in the ACCRA index than in the earnings of professionals in the work GPCI's reference occupations (Figure 8-7). While the ACCRA index ranges from 0.84 to 1.72, the index based on the earnings data ranges from 0.54 to 1.73.[7] Second, the correlation between the ACCRA index and the earnings of professionals used to construct the work GPCI depends on the level of the professionals' earnings. In areas where professional earnings are below average, there is little correlation between those earnings and the ACCRA index. The correlation coefficient for that relationship is 0.09. By contrast, the correlation of professional earnings with the ACCRA index is much higher in areas with above-average professional earnings. For those areas, the correlation coefficient is 0.65. From

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 13, 2013

FIGURE 8–8

Correlation between the 2012 GPCI and the Commission's hospital wage index



Note: GPCI (geographic practice cost index). Data exclude Puerto Rico and Alaska. Alaska's work GPCI is set at 1.5 by statute.

Source: MedPAC analysis of salary and wage data from the Bureau of Labor Statistics and the physician fee schedule final rule for 2012.

this analysis we can conclude that professional earnings behave somewhat differently than the cost-of-living index. That is, the cost-of-living index does not appear to track professional earnings very well.

Correlation of the work GPCI with the Commission's hospital wage index

We analyzed the correlation between the work GPCI and two measures of hospital wages: the CMS hospital wage index and a Commission-developed hospital wage index.[8] The wage index starts with county-level data, and we weighted these values by the relative share of work RVUs in each county to construct a value for each core-based statistical area and non–core-based statistical area rest-of-state locality. There is a strong correlation between the GPCI and the Commission's hospital wage index, with a correlation coefficient of about 0.79 (Figure 8-8).

The hospital wage indexes have a wider range than the physician work GPCI. For example, the Commission-developed wage index ranges from 0.75 (in Crawford, AR) to 1.59 (in Santa Clara, CA). Even if the adjustment were limited to one-quarter of the variation (like the GPCI), the highest cost locality would receive a 15 percent adjustment versus 7.7 percent under the current work GPCI.

Earnings of reference occupations compared with each other

The theory supporting the work GPCI is that the wages paid to workers for a unit of work should be equivalent in terms of the goods and services they can purchase with those wages regardless of the geographic area in which they work. Factors that vary geographically and are believed to influence wage differentials include cost of living and amenities. Data on the earnings of professionals in the reference occupations—architecture, engineering, and others—include the effects of both cost of living and amenities and therefore can serve as a measure of geographic variation in those factors as valued by physicians and other health professionals.

A comparison of each pair of reference occupations shows that the correlation coefficients are all positive (Table 8-2). Except for the comparisons of pharmacists with the six other occupations, the coefficients range from 0.413 to 0.688. The coefficients for the comparisons of pharmacists with the other occupations are generally lower, ranging from 0.133 to 0.425. The lower coefficients for pharmacists suggest that they may value cost of living and amenities differently than those in the other occupations. In further analyses examining the work GPCI, it may be useful to consider pharmacist earnings separately from the earnings of the other reference occupations.

Correlation of the work GPCI with physicians' earnings

In addition to IOM's questions about whether reference occupation earnings are a good proxy for cost of living net of amenities, the Commission believes that the correlation between health professionals' compensation and that of the reference groups might be poor for other reasons. The market for health professionals has characteristics that distinguish it from other markets:

- The compensation of physicians and other health professionals can have two components: wages and a return on investment from owning and operating a practice. Compensation may be higher in some areas than in others, depending on the profitability of practices.

EMBARGOED FOR RELEASE UNTIL 4:00PM JUNE 14, 2012

TABLE 8–2

Correlation coefficients among the seven component occupational groups composing the GPCI reference occupation index, 2011

	Index 1	Index 2	Index 3	Index 4	Index 5	Index 6	Index 7
Index	Architecture and engineering	Computer, mathematical, life and physical science	Social science, community and social service, and legal	Education, training, and library	Registered nurses	Pharmacists	Art, design, entertainment, sports, and media
1	1.000						
2	0.688	1.000					
3	0.482	0.675	1.000				
4	0.413	0.594	0.514	1.000			
5	0.493	0.635	0.588	0.587	1.000		
6	0.178	0.220	0.244	0.133	0.425	1.000	
7	0.460	0.676	0.633	0.535	0.557	0.098	1.000

Note: GPCI (geographic practice cost index). A correlation coefficient is a measure of the linear dependence between two variables and can range from –1 to 1.

Source: RTI analysis of Bureau of Labor Statistics Occupational Employment Statistics survey data from May 2011.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

- The earnings of physicians and other health professionals are partly a function of the volume of services they furnish. Compensation may be higher in high-volume areas and lower in low-volume areas.
- In some geographic areas, health professionals have market power, giving them a strong bargaining position relative to insurers. As a result, health professionals in those areas can command higher payments, with those payments possibly acting as an important determinant of compensation.

Given these factors, health professionals' higher compensation in some areas compared with others may not correlate with cost of living net of amenities.

To pursue the analysis proposed by the IOM committee, we analyzed data on physicians' earnings from two sources: BLS and the Medical Group Management Association (MGMA). The analysis shows that the data available on geographic variation in physicians' earnings have substantial limitations.

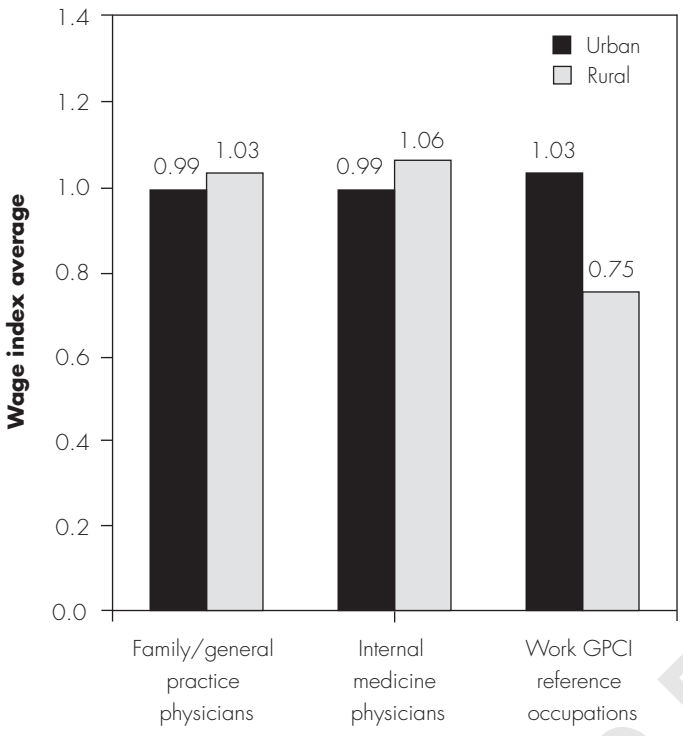
Analysis of BLS data on physicians' earnings BLS data on physicians' earnings have several important limitations. The data:

- are sparse at the level of individual specialties in smaller urban areas,
- are severely limited by having censored responses at upper income levels (greater than $187,200 per year),
- include wages only and omit benefits, and
- include wages of residents and fellows.

We took steps to address these data limitations. For example, to address the issue of sparse data, we conducted some analyses with special data tabulations for the Commission's mandated report provided by BLS. These tabulations combined all areas within a state into two categories: rural areas and urban areas. To further address the issue, we also analyzed data for the two physician specialties for which the most data were available: family/general practice and internal medicine.

Nonetheless, important data limitations remain. For instance, we attempted to adjust the BLS index of physicians' wages for the presence of residents' and fellows' wages in the data but were unsuccessful. In addition, while self-employed workers, owners, and partners in unincorporated firms are not eligible for participation in BLS's wage survey, physician owners

FIGURE 8–9 **Physicians' wages are higher in rural areas than in urban areas, 2011**



Note: GPCI (geographic practice cost index). Rural areas are nonmetropolitan areas. Index values are averages weighted by each area's level of employment in the respective occupation(s).

Source: RTI analysis of Bureau of Labor Statistics Occupation Employment Survey data from May 2011.

considered employees of their professional practice corporation are eligible. Therefore, some physician owners of practices—and their return on investment—may be represented in the data. In addition, the influence of such factors as return on investment, service volume, and market power are present in the BLS data.

Physicians' wages in rural and urban areas The first analysis using BLS data compared physicians' wages in one type of low-cost area—rural (nonmetropolitan) areas—and urban areas. Previous research shows that the earnings of physicians in rural areas, when adjusted for cost of living, exceeded the earnings of physicians in urban areas by a statistically significant 13 percent (Reschovsky and Staiti 2005).

Data were analyzed for the two physician specialties—family/general practice and internal medicine—judged to have sufficient sample data to permit reliable estimates for urban areas and rural areas. For each specialty, an index was computed as an area's average wage divided by the national average wage.

The findings were consistent with previous research (Figure 8-9). The average wage index for family/general practice physicians was 1.03 in rural areas but 0.99 in urban areas. For internal medicine physicians, we see a similar result: an average wage index of 1.06 in rural areas but 0.99 in urban areas. By contrast, a wage index constructed with data on the wages of professionals in the work GPCI's reference occupations showed lower wages in rural areas, with an average index value for rural areas of 0.75 compared with 1.03 for urban areas.

These results suggest that wage differentials for the reference occupations are consistent with economic theory but the differentials for physicians are not. However, the influence of such factors as return on investment, service volume, and market power make these findings inconclusive.

For further perspective on wage differentials between rural areas and urban areas, we used special data tabulations provided by BLS. Unlike the analyses in which the units of analysis were individual metropolitan statistical areas and statewide rural areas, these tabulations combined all areas within a state into just two categories: rural and urban. The special tabulations allowed us to overcome issues of sparse data and analyze wage differentials for more physician specialties than just family/general practice and internal medicine and to analyze wage differentials for other health occupations such as dentist, pharmacist, and registered nurse.

In these aggregate urban and rural area analyses by state, we continue to see a pattern of physicians' wages contrary to the pattern for other occupations: higher physicians' wages in rural areas than in urban areas (Table 8-3). The differentials range from 1 percent for family/general practice to 10 percent for the "other physicians and surgeons" category. In addition, we see similar differentials for dentists (3 percent), physical therapists (3 percent), and pharmacists (1 percent). However, the differentials for other health professionals indicate lower wages in rural areas than in urban areas, including registered nurses (–8 percent), occupational therapists (–3 percent), and respiratory therapists (–7 percent). However, as with physicians' earnings, data limitations make these findings inconclusive. Further, there could be differences between urban and rural

EMBARGOED FOR RELEASE UNTIL 10PM JUNE 14, 2013

TABLE 8–3

Rural–urban differences in BLS wages for selected health care professionals, from state special tabulations, 2011

		Mean annual wage		
Occupation code	**Description**	**Urban**	**Rural**	**Percent difference**
29–1062	Family and general practice	$176,156	$178,787	1%
29–1063	General internists	195,064	205,791	5
29–1064	Obstetricians and gynecologists	212,619	218,565	3
29–1067	Surgeons	227,091	228,706	1
29–1069	Other physicians and surgeons	189,512	207,650	10
29–1021	Dentists, general	163,880	169,296	3
29–1051	Pharmacists	111,016	111,797	1
29–1111	Registered nurses	67,212	61,820	–8
29–1131	Veterinarians	89,126	81,579	–8
29–1122	Occupational therapists	72,216	70,235	–3
29–1123	Physical therapists	77,153	79,536	3
29–1126	Respiratory therapists	55,059	51,126	–7

Note: BLS (Bureau of Labor Statistics). Table shows unweighted means across urban and rural state areas. See text for data limitations. Rural areas are nonmetropolitan areas.

Source: RTI analysis of BLS special tabulations for industry code 29 for 2011.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

physicians in their market power or in the volume of services they furnish.

Correlation of the work GPCI and physicians' wages We conducted a second analysis with BLS data on the correlation of the work GPCI with physicians' wages. The results were not surprising given the findings on differentials in physicians' wages in rural areas compared with urban areas.

The wages of professionals in the work GPCI's reference occupations are not correlated with the wages of physicians in family/general practice (Figure 8-10, p. 216). The correlation coefficient for this relationship is –0.079, but statistically it is not different from zero.

The wages of professionals in the work GPCI's reference occupations are negatively correlated with the wages of physicians in internal medicine (Figure 8-11, p. 216). The correlation coefficient for this relationship is –0.202, which is statistically significant.

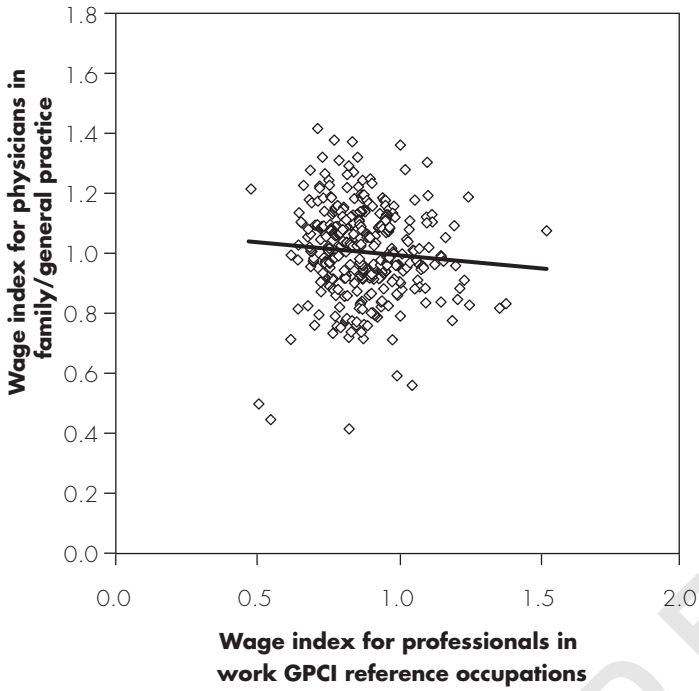
Analysis of MGMA data on physicians' earnings In further pursuit of physician compensation data, we examined MGMA's Physician Compensation and Production Survey:

- The 2012 Physician Compensation and Production Survey sample (based on data from 2011) includes 62,245 physicians and other health professionals working in 2,913 organizations.
- The survey data represent 174 specialties.
- Survey data are available for both self-employed and employed physicians.
- Survey data exclude residents.
- Organizations participating in the survey are a mix of MGMA members (70 percent) and nonmembers (30 percent).
- Clinicians represented are geographically dispersed: East (24 percent), Midwest (32 percent), South (21 percent), and West (23 percent).
- The survey data include a measure of productivity: RVUs.

MGMA accommodated the Commission and our contractor with special data tabulations.[9] However, in documenting its work using the MGMA data, the

FIGURE 8–10

Wages of professionals in work GPCI's reference occupations are not correlated with wages of physicians in family/general practice, 2011



Note: GPCI (geographic practice cost index).

Source: RTI International analysis of Bureau of Labor Statistics Occupational Employment Survey data from May 2011.

Commission's contractor noted that (1) the medical-practice response rate for the 2012 data was 8.2 percent, and (2) because of sample size issues, specialty-level detail was available only from tabulations that combined all areas within a state into either rural areas or urban areas.

Given the data available, we combined data for both employed and self-employed physicians and calculated indexes of physician compensation by specialty, comparing rural and urban areas (Table 8-4).[10] The comparison showed that compensation was higher in rural areas than in urban areas. The differences ranged from 1 percent higher for internal medicine to 8 percent higher for general surgery. Unlike the results based on BLS data, these results account for any differences among areas in physician productivity. That is, the results based on MGMA data are differences in compensation per RVU. This distinction is important because at least one analysis shows that physicians in rural areas work more hours per week and employ more staff per physician than physicians in large urban areas, suggesting that the volume of services per physician is higher in rural areas than in urban areas (Gillis 2009). Nonetheless, similar to their effect on the BLS data, the influences of return on investment and market power apply to the MGMA data as well.

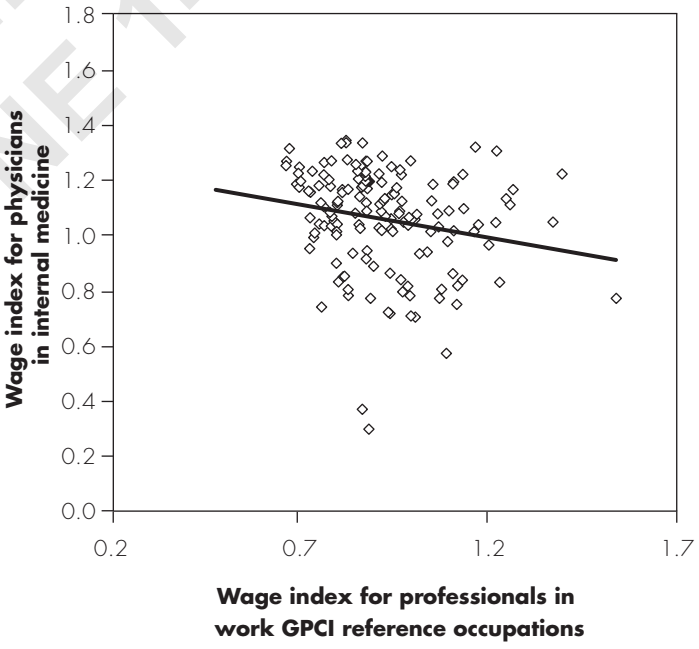
Because of sample size issues, we also made no attempt to use the MGMA data to analyze the correlation of physician compensation and the earnings of professionals in the work GPCI's reference occupations.

Impact of work GPCI on access to care

As discussed in the June 2012 report's chapter on serving rural Medicare beneficiaries, the Commission's principle for access to care is that beneficiaries should have equitable access to services regardless of their geographic location (Medicare Payment Advisory Commission 2012b). In that report, we analyzed a number of measures of access to health care services and physician services in particular. In general, there are differences between rural

FIGURE 8–11

Correlation of wages of professionals in work GPCI's reference occupations with wages of internal medicine physicians is negative, 2011



Note: GPCI (geographic practice cost index).

Source: RTI International analysis of Bureau of Labor Statistics Occupational Employment Survey data from May 2011.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

TABLE 8–4 **Aggregate urban–rural differentials in MGMA indexes by specialty, 2012**

		Urban	Rural	Percent difference
Family medicine only	Number of responses	3,780	793	
	Number of practices	322	152	
	Index	0.985	1.017	3%
General internal medicine only	Number of responses	2,785	381	
	Number of practices	236	79	
	Index	0.999	1.005	1
Cardiology (all)	Number of responses	1,258	164	
	Number of practices	314	59	
	Index	0.995	1.019	2
Ophthalmology	Number of responses	241	47	
	Number of practices	71	21	
	Index	0.993	1.025	3
General surgery	Number of responses	751	172	
	Number of practices	148	63	
	Index	0.981	1.061	8

Note: MGMA (Medical Group Management Association). Rural areas are nonmetropolitan areas.

Source: RTI analysis of MGMA special tabulations from 2012 physician compensation survey.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

and urban areas in the supply of physicians and other health professionals. However, we found no difference in service use between subcategories of rural areas and urban areas.

For this report on the work GPCI, we reviewed access measures specific to the Medicare population for differences across low-GPCI and high-GPCI areas. We examined access from two perspectives: supply, as measured by changes in the number of physicians and other health professionals billing FFS Medicare, and beneficiary service use.

In general, we found that changes in supply were similar in areas where the work GPCI was less than 1, compared with areas where the work GPCI was greater than or equal to 1. In both types of areas, despite differences in the base supply of professionals per beneficiary, the number of professionals billing FFS Medicare was rising at least as fast as the number of beneficiaries.

As to service use, ambulatory services per beneficiary were similar between areas with work GPCIs below 1 and those with work GPCIs above 1. Not only was average service use similar, but the distributions of service use were similar. That is, despite differences in supply across high- and low-GPCI areas, similarities existed in the minimum and maximum levels of office visits to physicians and other health professionals.

Physicians and other health professionals billing Medicare

Our data on physicians and other health professionals billing FFS Medicare come from Medicare enrollment files and claims for fee schedule services furnished in 2009 and 2010 (Table 8-5, p. 218). It would have been useful to analyze such data for years before 2009; however, the type of identification number that physicians and other health professionals used in submitting claims to Medicare changed in 2008. That change prevents us from reliably analyzing longer term trends in physicians and other health professionals billing Medicare.

The data show that, on average, the number of beneficiaries rose at the same rate in areas where the work GPCI was less than 1 and where it was greater than or equal to 1. That growth rate, which was 2.4 percent, was also similar to the increase in the number of physicians

TABLE 8–5

Increase in physicians and other health professionals billing FFS Medicare does not appear dependent on level of work GPCI

	Number of beneficiaries (in thousands)		Professionals billing FFS Medicare							
			Physicians				Other health professionals			
	Work GPCI		Work GPCI < 1		Work GPCI ≥ 1		Work GPCI < 1		Work GPCI ≥ 1	
	< 1	≥ 1	Number	Number per 1,000 beneficiaries	Number	Number per 1,000 beneficiaries	Number	Number per 1,000 beneficiaries	Number	Number per 1,000 beneficiaries
2009	30,770	14,541	320,862	10.4	204,385	14.1	161,903	5.3	72,020	5.0
2010	31,499	14,895	328,418	10.4	209,416	14.1	171,888	5.5	76,928	5.2
Increase	2.4%	2.4%	2.4%	0.0%	2.5%	0.0%	6.2%	3.7%	6.8%	4.3%

Note: FFS (fee-for-service), GPCI (geographic practice cost index). Beneficiary counts including those in FFS and Medicare Advantage assume that professionals are furnishing services to both types. Professionals billing FFS Medicare include those furnishing services to more than 15 different beneficiaries in a given year.

Source: MedPAC analysis of claims data for 100 percent of Medicare beneficiaries.

billing FFS Medicare in both area types. In areas where the work GPCI was less than 1, the number of physicians billing Medicare went up by 2.4 percent. In areas where the work GPCI was greater than or equal to 1, the number of physicians billing Medicare went up by 2.5 percent. Given this similarity in growth rates, the number of physicians billing FFS Medicare per 1,000 beneficiaries was unchanged.

These figures should not be interpreted to mean that the number of physicians in both low- and high-GPCI areas was the same. In areas where the work GPCI was less than 1, the number of physicians billing FFS Medicare per 1,000 beneficiaries was 10.4. In areas where the work GPCI was greater than or equal to 1, the number of physicians billing FFS Medicare per 1,000 beneficiaries was 14.1. Nonetheless, the absence of a change in the ratios suggests that the availability of services furnished by physicians did not change from 2009 to 2010.

The data also show that the numbers of other health professionals billing FFS Medicare—such as nurse practitioners, physicians' assistants, and physical therapists—went up from 2009 to 2010 at rates higher than the growth in the number of beneficiaries. In areas where the work GPCI was less than 1, the number of these professionals rose by 6.2 percent. In areas where the work GPCI was greater than or equal to 1, the growth rate was 6.8 percent.

Geographic variation in service use

In the Commission's June 2012 chapter on serving rural Medicare beneficiaries, we concluded that, despite lower physician-to-population ratios and the difficulties in recruiting physicians to practice in rural areas, beneficiaries in rural and urban areas used comparable amounts of health care in every service we examined and across the spectrum of rural areas (from those adjacent to urban areas to those in sparsely populated frontier counties). However, while finding little difference between rural and urban beneficiaries' service use within regions of the country, we found significant differences in health care service use by Medicare beneficiaries *across* regions. Accordingly, rural service use was high in regions where urban use was high, and rural service use was low in regions where urban use was low.

These findings are relevant to the issue of the work GPCI's impact on access to care. First, rural areas—as a group—are among the areas that have work GPCIs less than 1. If we find that service use is comparable in both, we expect a similar result when comparing low-GPCI areas with high-GPCI areas. Second, the findings on service use reported in our June 2012 report—based on data for 2008—are consistent with what we found earlier using 1999 data and before the floor on the work GPCI was implemented in 2004 (Medicare Payment Advisory Commission 2001). This consistency suggests that the floor—which had the effect of raising payments in low-wage areas—has not had an effect on service use or, therefore, access.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Reanalyzing the 2008 data but comparing low-GPCI areas with high-GPCI areas, we see further consistency in results (Table 8-6). The analysis finds that, on average, beneficiaries received similar levels of care whether they lived in areas with a work GPCI less than 1 or in areas with a work GPCI greater than or equal to 1. The distribution of regional variation was similar for both: In areas with a work GPCI less than 1, the number of annual visits per beneficiary ranged from 8 to 13, compared with 8 to 12 visits in areas with a work GPCI greater than or equal to 1. Mean visit rates were also similar: 10.2 visits per year in areas with a work GPCI less than 1 and 10.0 visits per year in areas with a work GPCI greater than or equal to 1.

TABLE 8–6

Beneficiary service use is similar when low-GPCI areas are compared with high-GPCI areas, 2008

Region	Annual visits to physician office or outpatient facility per beneficiary
Range:	
Work GPCIs < 1	8 to 13
Work GPCIs ≥ 1	8 to 12
Mean:	
Work GPCIs < 1	10.2
Work GPCIs ≥ 1	10.0

Note: GPCI (geographic practice cost index). Analysis excludes Puerto Rico and Alaska.

Source: MedPAC analysis of beneficiary-level Medicare spending from the 2008 Beneficiary Annual Summary file.

Variation in service use among statewide localities with both urban and rural areas

Currently, 34 states have a statewide locality for their work GPCI, so the value of the work GPCI is the same across rural and urban areas within that state. To exploit this natural experiment in which areas that may have differences in the underlying cost of physicians' work receive the same GPCI adjustment, we reviewed service use for urban and rural areas within the 34 statewide localities.

In general, service use was similar for rural areas and urban areas within statewide localities (Figure 8-12, p. 220). On average, there were 10.4 visits per beneficiary in the rural areas and 9.7 visits per beneficiary in the urban areas. Further, the differences in service use between rural areas and urban areas *within each locality* were small. While the within-locality differences (a locality's rural visit rate minus its urban visit rate) ranged from –2.5 visits to 2.6 visits among all of the statewide localities, for most of these localities (65 percent), the within-locality differences were much smaller, ranging from –0.5 visit to 1.0 visit. By contrast, visits per beneficiary varied far more widely across the rural and urban areas in the statewide localities, ranging from 7.0 visits to 13.8 visits. In short, the variation in visit rates was much greater between statewide localities than it was within them. Consistent with findings in the Commission's June 2012 chapter on serving rural Medicare beneficiaries, it appears that there are significant differences in service use across regions of the country but little difference between rural and urban beneficiaries' service use within those regions.

This pattern—similar visit rates in both rural areas and urban areas—is characteristic also of localities that are not statewide (Table 8-7, p. 221). In localities that are not statewide, average visit rates were 10.8 visits per beneficiary in rural areas and 10.2 visits per beneficiary in urban areas.

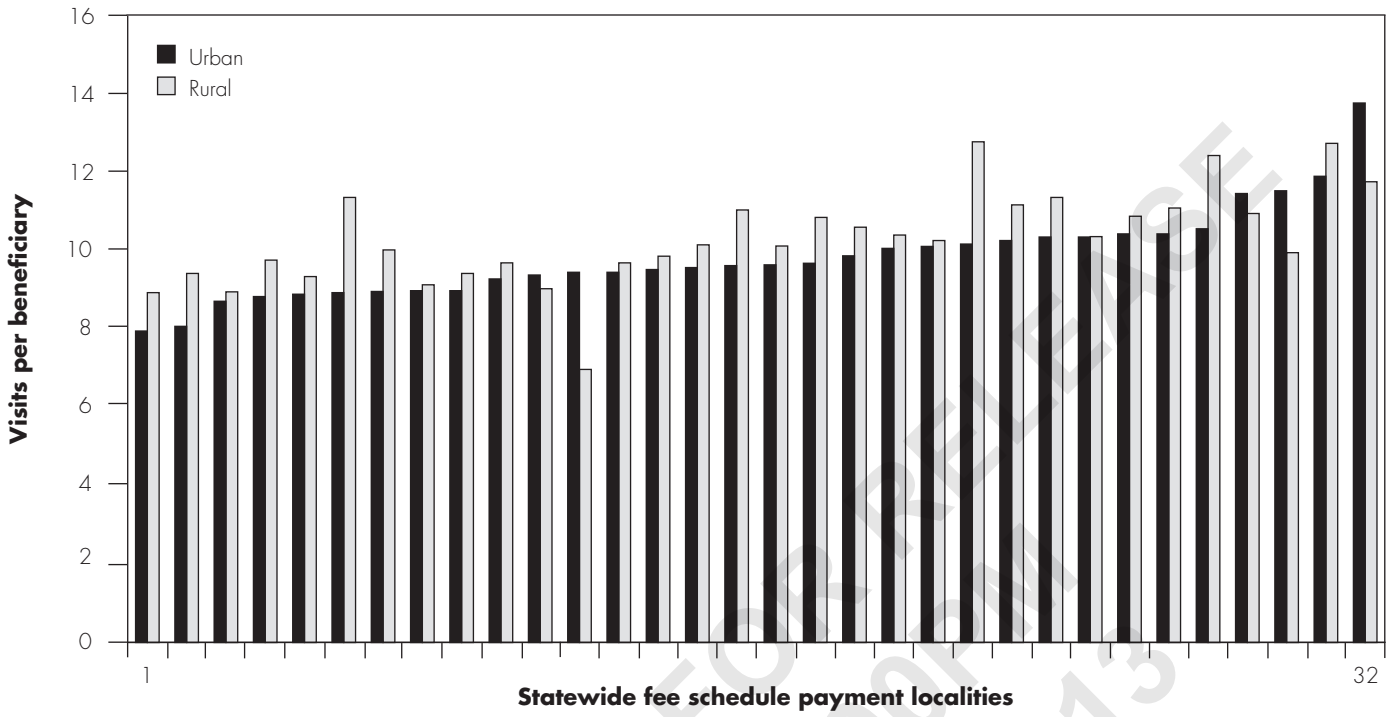
Relationship between fees and access

The Commission also analyzed the general relationship between fees and access to care—specifically, whether areas with higher physician fees have higher levels of physician access, reflected by shorter wait times, less difficulty finding a practitioner, and so on.

The Center for Studying Health System Change's (HSC's) 2005 Community Tracking Study provides some insight on this question. In 2002, physicians' fees under Medicare were cut by 5.4 percent pursuant to the sustainable growth rate. The HSC study found that Medicare beneficiaries were no more likely to report that they delayed or did not receive needed care between 2001 and 2003—that is, before and after the fee cut went into effect. In fact, the number of Medicare beneficiaries reporting that they delayed or had forgone needed care went down over this time period, and the rates also improved for near-aged enrollees in the private market. This finding suggests that broader market trends were affecting access, not the fee cut in Medicare. Other measures of access such as the average wait times for visits with primary care physicians or specialists for Medicare beneficiaries remained

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

FIGURE 8–12 **Service use is similar for rural and urban areas in statewide localities, 2008**



Note: Visits are to a physician's office or outpatient facility. There are 34 statewide payment localities. Analysis excludes Puerto Rico and Alaska. Rural areas are nonmetropolitan areas.

Source: MedPAC analysis of beneficiary-level Medicare spending from the 2008 Beneficiary Annual Summary file.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

relatively constant between 2001 and 2003 (Trude and Ginsburg 2005).

Furthermore, the HSC study also found that Medicare beneficiaries in areas where private rates were significantly higher than Medicare rates were no more likely to face access problems than Medicare beneficiaries in areas where private fees were closer to Medicare rates. One could theorize that, if payment rates had a significant effect on access, beneficiaries in areas where private sector rates are much higher than Medicare rates could face difficulty in obtaining care. However, the study found no differences in access across areas with a low differential between Medicare and private insurers and areas with a high differential between Medicare and private insurers (Trude and Ginsburg 2005).

Effect of work GPCI on spending

To assess the impact of the work GPCI on spending, we considered its impact on payment rates for specific services across localities. We also analyzed the budgetary impact of alternatives to current law.

Examples of how payment rates vary across localities

The work GPCI's effect on payments for fee schedule services depends on the value of the GPCI and the share of the payment that accounts for work (as opposed to practice expense and professional liability insurance). For instance, the effect of the work GPCI on total payment differs for evaluation and management services, imaging, and surgery (Table 8-8). In general, evaluation and management services have about an average share of the payment attributable to work, imaging has a lower share of the payment attributable to the work component, and surgery has a higher proportion of the total payment attributable to work.

Spending impacts of alternatives to current law

In November 2012, when the Commission voted on the recommendation developed in light of our analytic

work on the work GPCI over the prior year, there was a temporary floor of 1.0 for localities with a work GPCI less than 1. This temporary floor was scheduled to expire at the end of calendar year 2012.[11] After that, payments in localities with a work GPCI of below 1.0 would go down. The Commission considered two policy options to this then-current-law scenario: repealing the work GPCI or extending the floor.

The first option, to repeal the work GPCI, would likely result in a small increase in Medicare spending because more RVUs of work are furnished in localities with a work GPCI below 1.0 than in localities with a work GPCI of 1.0 or above. In other words, the increases in payment would be larger than the decreases in payments, resulting in a cost. The second option, retaining the floor of 1.0 for the work GPCI, would have a more significant cost. These impacts would be the same relative to current law, under which the work GPCI floor expires at the end of 2013.

Recommendation

The Commission finds the following evidence of the need for geographic adjustment of fee schedule payments for professional work:

- Cost of living varies geographically.
- Earnings vary geographically for the professionals in the work GPCI's reference occupations.

TABLE 8–7

Rural and urban area visit rates are similar in statewide and other localities, 2008

	Annual visits per beneficiary		
	Urban	Rural	Difference
Statewide localities	9.7	10.4	0.7
Other localities	10.2	10.8	0.6

Note: Visits are to a physician's office or outpatient facility. Analysis excludes Puerto Rico and Alaska. Rural areas are nonmetropolitan areas.

Source: MedPAC analysis of beneficiary-level Medicare spending from the 2008 Beneficiary Annual Summary file.

- To the extent we can measure geographic variation in physician earnings, those earnings vary, suggesting that the market for physician services is not uniform nationally.
- Medicare explicitly recognizes variation in the earnings of other health care workers by geographically adjusting the labor portion of payments to other provider types.

However, the current adjustment—the work GPCI—is flawed in concept and implementation. The Secretary should replace it. Conceptually, the GPCI is based on the earnings of professionals in the reference occupations, but the labor market for those professionals does not appear to resemble the labor market for physicians and other health

TABLE 8–8

Examples of variation in payment due to work GPCI, 2012

	Evaluation and management visit	Transthoracic echocardiography, complete	Total knee arthroplasty
National payment amount	$70.46	$213.08	$1,544.29
Effect of work GPCI			
10th percentile (West Virginia)	–$1.22	–$1.64	–$29.28
90th percentile (NYC suburbs)	+$1.62	+$2.16	+$38.77
Percentage difference between 90th and 10th percentile	4.0%	1.8%	4.4%

Note: GPCI (geographic practice cost index), NYC (New York City). Effects are only of the work GPCI and reflect no other geographic adjustments. The evaluation and management visit is Current Procedural Terminology (CPT) code 99213. The echocardiography service is CPT code 93306. The knee arthroplasty service is CPT code 27447. Percentages calculated with amounts in table may not equal results shown due to rounding.

Source: CMS physician fee schedule final rule for 2012.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

professionals. Implementation of the work GPCI is flawed because no sources of data on the earnings of physicians and other health professionals appear to be of sufficient quality to validate the GPCI.

While there is evidence that the work GPCI is flawed, it is not sufficiently definitive to execute an immediate change in current law.

- The data are insufficient to establish a new index in the short run.
- We are unable to determine whether the work GPCI has an effect on quality of care.
- There is no evidence that the GPCI affects access. Moreover, access is better addressed through other targeted policies, such as the primary care bonus.
- Current law requires a one-quarter GPCI applied to all localities and expiration of the floor. Extension of the floor would increase Medicare spending. Other departures from current law would redistribute payments among localities without clear evidence of a known effect on access and without evidence of an improvement in equity.

RECOMMENDATION 8

Medicare payments for work under the fee schedule for physicians and other health professionals should be geographically adjusted. The adjustment should reflect geographic differences across labor markets for physicians and other health professionals. The Congress should allow the geographic practice cost index (GPCI) floor to expire per current law and, because of uncertainty in the data, should adjust payments for the work of physicians and other health professionals only by the current one-quarter GPCI and direct the Secretary to develop an adjuster to replace it.

RATIONALE 8

This recommendation responds to the flaws in concept and implementation of the current work GPCI and calls on the Secretary to replace the current GPCI with one that reflects the labor market for physicians and other health professionals. Three paths could be pursued in developing the data to support a new geographic adjustment for physician work.

The first approach would have the Medicare program directly collect data on the earnings and service volume of physicians and other health professionals. This approach would have the benefit of using directly observed physician earnings, and CMS could define the scope and breadth of the data collection. One drawback is that CMS has had difficulty in the past fielding physician surveys. Furthermore, directly observing physician earnings raises the concern that the earnings reflect geographic variation in return on investment (profitability of practices) and variation in the volume of services provided under FFS, as well as market concentration of insurers or providers. Another issue is the circular relationship between the GPCI and the data used to construct it that would result if data on the earnings of physicians and other health professionals were used to construct the work GPCI.

However, the method of data collection can overcome some of these factors to the extent they are observable. For example, the concern about representation of return on investment in the earnings data could be addressed by including only data for physicians and other health professionals who are not practice owners but instead are employees.[12] A strategy for overcoming the effect of service volume on earnings would be to collect the data as earnings per unit of work effort, such as earnings per RVU. Regardless of the data collection methods chosen, the use of CMS to collect these data would require significant administrative resources. Further, despite the best possible efforts to ensure that the data collected are as free as possible of the confounding factors discussed above, it is likely that such data will never be perfect, and thus any gains in precision stemming from such efforts would need to be seriously weighed against the cost of collecting these data.

The second approach in studying physician earnings would use private market fees paid to physicians and other health professionals. On the one hand, a market fee for a specific service would circumvent the effect of volume on physician earnings. The data are also more likely to be readily available and would not require CMS to collect additional data. On the other hand, the use of market fees would include the influences on physicians' earnings of return on investment and market consolidation. Analyses of private market fees conducted by the Commission and others have shown wide variation even within markets for the same service (Medicare Payment Advisory Commission 2011a).

The third approach would base the work GPCI on an alternative, such as a cost-of-living index or the hospital wage index. Such alternatives have the advantage of availability: They exist for other purposes and would not require an investment of resources for data collection.

EMBARGOED FOR RELEASE UNTIL 6:00PM JUNE 15, 2012

However, it would be necessary to establish whether any such alternative to the work GPCI is a valid measure of geographic variation in the work effort of physicians. The work GPCI is intended to account for geographic variation in cost of living but also in professional factors, such as access to quality colleagues, and personal factors, such as availability of good schools. It is unclear whether these factors are adequately represented by alternative indexes such as a cost-of-living index or the hospital wage index.

In developing a new geographic adjustment for physician work, the Secretary should adhere to certain deadlines. By law, the GPCIs have been updated at least every three years since the fee schedule was instituted in 1992, with the seventh in the series of such updates scheduled for 2014. Within the next year, the Secretary should have a plan for a new work GPCI. It should be implemented as part of the upcoming GPCI update.

IMPLICATIONS 8

Spending

- Because the recommendation follows current law, it will not directly affect program spending.

Access

- We do not expect the recommendation to affect beneficiaries' access to the services of physicians and other health professionals or the willingness of these providers to provide care to Medicare beneficiaries.

Quality

- We expect that the recommendation is neutral with respect to quality of care (has no implications).

Delivery system reform

- We expect that the recommendation is neutral with respect to advancing delivery system reform. ■

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Endnotes

1 For further information, see the Commission's *Payment basics: Physician services payment system* (Medicare Payment Advisory Commission 2012a) .

2 These IOM simulations are based on continuation of the current work GPCI with its one-quarter limit on variation in input prices among geographic areas and no floor on the GPCI.

3 On the point about factors other than financial considerations influencing supply, research has shown that compensation is not the only factor influencing specialty choice and that other factors—such as the ability to master an area of clinical practice—may be more important (Borman et al. 2010).

4 Limitations of the American Community Survey (ACS) noted by the IOM committee were, first, that the data include the earnings of residents in addition to the earnings of other physicians. Second, the ACS data include data on both employed and self-employed physicians. Therefore, in the case of the self-employed physicians, the earnings data would include not just earnings from patient care but also the return on investment from owning and operating a practice. Third, representation of different specialties in the data could vary annually depending on the specialties of the physicians reporting data.

5 C2ER is a membership organization focused on community and economic research. Its members include research professionals from chambers of commerce, government agencies, utility companies, and universities. The C2ER website is http://www.c2er.org.

6 The composite index is an index of price levels in urban areas. The survey upon which the index is based is voluntary. The urban areas represented can vary over time.

7 For reference, the work GPCI—as limited to one-quarter of a locality's relative cost—ranges from 0.945 to 1.077 (excluding Puerto Rico's GPCI of 0.908 and Alaska's legislated GPCI of 1.500).

8 In 2007, the Commission recommended repealing the current hospital wage index statute and establishing in its place a hospital compensation index that uses wage data for all employers and industry-specific occupational weights, is adjusted for geographic differences in the ratio of benefits to wages, is adjusted at the county level, and smooths large differences between counties.

9 The data provided by MGMA were in the form of an index of physician compensation per work RVU. Index values were calculated by dividing mean compensation per work RVU for a given area by the mean value for all MGMA survey respondents. Data for rural physicians were from respondents who identified their practices as being in a nonmetropolitan area with a population of less than 50,000. Data for urban physicians were from respondents who identified their practices as being in a metropolitan area with a population of more than 50,000.

10 To limit any effect that return on investment may have on physician compensation, we had hoped to analyze data for employed physicians separately from data for self-employed physicians. However, data limitations prevented us from doing so. See the contractor's report, available at http://www.medpac.gov, for further details.

11 The American Taxpayer Relief Act of 2012 extended the GPCI floor by one year.

12 Nonetheless, any data collected on employed physicians may be affected by factors other than return on investment, such as the market factors discussed earlier.

EMBARGOED FOR RELEASE UNTIL 6:00PM EDT JUNE 14, 2013

References

Borman, K. R., T. W. Biester, and R. S. Rhodes. 2010. Motivations to pursue fellowships are gender neutral. *Archives of Surgery* 145, no. 7 (July): 671–678.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2012. Medicare program; revisions to payment policies under the physician fee schedule, DME face-to-face encounters, elimination of the requirement for termination of non-random prepayment complex medical review and other revisions to Part B for CY 2013. *Federal Register* 77, no. 146 (July 30): 44721–45061.

Dalton, K., G. C. Pope, W. Adamache, et al. 2012. *Geographic adjustment of Medicare payments for the work of physicians and other health professionals.* Report for the Medicare Payment Advisory Commission. Washington, DC: MedPAC.

Gillis, K. D. 2009. *Physician practice expenses by location.* Policy research perspectives. Washington, DC: American Medical Association.

Gillis, K. D., R. J. Willke, and R. A. Reynolds. 1993. Assessing the validity of the geographic practice cost indexes. *Inquiry* 30 (Fall): 265–280.

Ginsburg, P. B. 1991. The content and rationale of PPRC recommendations to Congress. In *Regulating doctors' fees: Competition, benefits, and controls under Medicare.* Washington, DC: The AEI Press.

Government Accountability Office. 2007. *Geographic areas used to adjust physician payments for variation in practice costs should be revised.* GAO–07–466. Washington, DC: GAO.

Government Accountability Office. 2005. *Geographic adjustment indices are valid in design, but data and methods need refinement.* GAO–05–119. Washington, DC: GAO.

Institute of Medicine. 2012. *Geographic adjustment in Medicare payment, Phase II: Implications for access, quality, and efficiency.* Washington, DC: The National Academies Press.

Institute of Medicine. 2011. *Geographic adjustment in Medicare payment, Phase I: Improving accuracy. Second edition.* Washington, DC: The National Academies Press.

Kitchell, M. 2011. Letter from the Iowa Medical Society to the Institute of Medicine Committee on Geographic Adjustment Factors in Medicare Payment, June 6. http://www.iowamedical.org/documents/news/060911_MedicareIOMKitchellStmt.pdf.

Marshfield Clinic. 2002. Medicare's geographic cost adjustors. Written testimony before the Health Subcommitte, Committee on Ways and Means, U.S. House of Representatives. 107th Cong., 2nd sess. July 23.

Medicare Payment Advisory Commission. 2012a. *Payment basics: Physician and other health professionals payment system.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2012b. *Report to the Congress: Medicare and the health care delivery system.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2011a. *Report to the Congress: Medicare and the health care delivery system.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2011b. *Report to the Congress: Regional variation in Medicare service use.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2007. *Report to the Congress: Promoting greater efficiency in Medicare.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2001. *Report to the Congress: Medicare in rural America.* Washington, DC: MedPAC.

Physician Payment Review Commission. 1989. *Annual report to Congress.* Washington, DC: PPRC.

Pope, G. C., W. P. Welch, S. Zuckerman, et al. 1989. Cost of practice and geographic variation in Medicare fees. *Health Affairs* 8, no. 3 (Fall): 117–128.

Reding, D. J. 2010. Testimony before the Institute of Medicine Committee on Geographic Adjustment Factors in Medicare Payment on behalf of the Healthcare Quality Coalition. http://iom.edu/~/media/Files/Activity%20Files/HealthServices/GeographicAdjustment/Testimony/Marshfield%20Reding%20Testimony6.pdf.

Reschovsky, J. D., and A. Staiti. 2005. *Physician incomes in rural and urban America.* Issue brief no. 92. Washington, DC: Center for Studying Health System Change.

Trude, S., and P. B. Ginsburg. 2005. *An update on Medicare beneficiary access to physician services.* Issue brief no. 93. Washington, DC: Center for Studying Health System Change. February.

Zuckerman, S., and S. Maxwell. 2004. *Reconsidering geographic adjustments to Medicare physician fees.* Report for the Medicare Payment Advisory Commission. Washington, DC: MedPAC.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 13, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

CHAPTER 9

Mandated report: Improving Medicare's payment system for outpatient therapy services

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

RECOMMENDATIONS

9-1 The Congress should direct the Secretary to:

- reduce the certification period for the outpatient therapy plan of care from 90 days to 45 days, and
- develop national guidelines for therapy services, implement payment edits at the national level based on these guidelines that target implausible amounts of therapy, and use authorities granted by the Patient Protection and Affordable Care Act of 2010 to target high-use geographic areas and aberrant providers.

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

9-2 To avoid caps without exceptions, the Congress should:

- reduce the therapy cap for physical therapy and speech–language pathology services combined and the separate cap for occupational therapy to $1,270 in 2013. These caps should be updated each year by the Medicare Economic Index.
- direct the Secretary to implement a manual review process for requests to exceed cap amounts, and provide the resources to CMS for this purpose.
- permanently include services delivered in hospital outpatient departments under therapy caps.
- apply a multiple procedure payment reduction of 50 percent to the practice expense portion of outpatient therapy services provided to the same patient on the same day.

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

9-3 The Congress should direct the Secretary to:

- prohibit the use of V codes as the principal diagnosis on outpatient therapy claims, and
- collect functional status information on therapy users using a streamlined, standardized, assessment tool that reflects factors such as patients' demographic information, diagnoses, medications, surgery, and functional limitations to classify patients across all therapy types. The Secretary should use the information collected using this tool to measure the impact of therapy services on functional status, and provide the basis for development of an episode-based or global payment system.

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

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

CHAPTER 9

Mandated report: Improving Medicare's payment system for outpatient therapy services

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Chapter summary

Medicare's outpatient therapy benefit covers services for physical therapy, occupational therapy, and speech–language pathology. These services can be beneficial when medically necessary but may be subject to inappropriate use. The Middle Class Tax Relief and Job Creation Act of 2012 required the Commission to study outpatient therapy services provided under Medicare Part B and make recommendations for reforming Medicare's payment system for these services by June 15, 2013. The legislation directed the Commission to examine two areas: (1) how to better document patients' functional limitations and severity of condition and thus better assess patients' therapy needs, and (2) private sector initiatives to manage outpatient therapy. The Commission issued recommendations to the Congress in November 2012, in advance of the statutory report deadline, because certain statutory provisions related to Medicare's outpatient therapy benefit were scheduled to expire at the end of 2012. The recommendations in this report are based on information available and analyses completed at that time.

Outpatient therapy services are designed to restore function that patients have lost due to illness or injury and to help patients maintain improved function. Physical therapy can improve a patient's balance, strength, mobility, and independence. Occupational therapy can improve a patient's ability to perform activities of daily living, such as bathing, dressing, and managing medications.

In this chapter

- Introduction
- Medicare payment policy for outpatient therapy services
- Medicare spending on outpatient therapy services
- Recommendations

Speech therapy can improve language skills for patients who suffer from difficulty speaking after a stroke.

To qualify for coverage under the Medicare outpatient therapy benefit, beneficiaries must meet several conditions, which include (but are not limited to) being under the care of a physician and having a certified plan of care for therapy. Medicare pays for outpatient therapy services under the fee schedule for physicians and other health professionals. In 2011, Medicare spending on outpatient therapy totaled $5.7 billion, with services provided to 4.9 million beneficiaries. That year, about 45,000 physical therapists, occupational therapists, and speech–language pathologists billed Medicare independently for outpatient therapy services. Outpatient therapy services were delivered in skilled nursing facilities (37 percent of total spending), hospital outpatient departments (16 percent), outpatient rehabilitation facilities and home health agencies (11 percent), and other settings (7 percent). In office-based settings, physical therapists in private practice accounted for 30 percent of spending.

Under Medicare, there are two per beneficiary annual spending limits (caps) on outpatient therapy services to restrain excessive spending and utilization. There is one cap for physical therapy and speech–language pathology services combined and another cap for occupational therapy services. Each cap equals $1,900 in allowed charges for 2013. A broad exceptions process allows providers to deliver services above either spending cap relatively easily, limiting the effectiveness of the caps. There also is a manual review process, implemented in October 2012, for beneficiaries whose annual spending on occupational therapy or physical therapy and speech–language pathology services combined exceeds $3,700, but it does not apply to the majority of beneficiaries who exceed the caps. While the caps are permanent by statute, the exceptions process expires periodically under current law unless explicitly reauthorized by the Congress. At the time the Commission prepared this report, the exceptions process was scheduled to expire on December 31, 2012. However, the American Taxpayer Relief Act of 2012 extended the exceptions process from January 1, 2013, through December 31, 2013. Had the exceptions process expired, the caps would have been enforced with no process for beneficiaries to obtain additional outpatient therapy services beyond the caps.

The Commission found that outpatient therapy services can help Medicare beneficiaries improve their level of function and live independently, but at the same time, Medicare's outpatient therapy benefit is vulnerable to abuse. Medicare lacks clear guidelines to determine the appropriate frequency, type, and duration of outpatient therapy services. Further, Medicare's physician oversight requirements for outpatient therapy are relatively weak—once a physician or nonphysician practitioner certifies that a beneficiary requires outpatient therapy, the beneficiary

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

can receive services for 90 days without further oversight. Due to the lack of comprehensive coverage guidelines and effective mechanisms to control volume, the use of outpatient therapy varies widely across the country. Medicare spending on outpatient therapy users in the highest spending areas of the country is five times more than that in the lowest spending areas of the country, even after controlling for differences in patients' health status.

To evaluate the recommendations for improving Medicare's outpatient therapy benefit, the Commission specifically focused on each recommendation's effect on program spending, quality of care, and beneficiaries' access to care. We also considered whether a recommendation would advance payment reform—that is, move Medicare payment policy away from fee-for-service payment toward a more integrated delivery system. The Commission's recommendations aim to strike a balance between ensuring access to needed care and discouraging unnecessary service use.

The Commission's recommendations are intended to decrease inappropriate use of outpatient therapy services and to provide the Medicare program with essential data on patients' conditions, services received, and outcomes. The recommendations would improve payment accuracy by fully accounting for the efficiencies of a single provider delivering multiple therapy services to a patient on the same day, increase physician oversight of outpatient therapy regimens, and provide physicians and therapy practitioners with clear guidance regarding when such services are medically indicated and the outcomes that should be expected. The recommendations also lay out a rigorous review process designed to minimize the potential for abuse of the outpatient therapy benefit while giving beneficiaries who need higher levels of outpatient therapy the means to obtain it. Enactment of the Commission's recommendations would increase Medicare spending for outpatient therapy services relative to a policy of hard therapy caps (i.e., caps with no exceptions). However, hard therapy caps would decrease access to therapy services not only for those who might otherwise receive questionable levels of therapy but also for those whose medical conditions appropriately warrant high levels of therapy services. ■

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

Section 3005 of the Middle Class Tax Relief and Job Creation Act of 2012

SEC. 3005. PAYMENT FOR OUTPATIENT THERAPY SERVICES.

(f) MedPAC Report on Improved Medicare Therapy Benefits.—Not later than June 15, 2013, the Medicare Payment Advisory Commission shall submit to the Committees on Energy and Commerce and Ways and Means of the House of Representatives and to the Committee on Finance of the Senate a report making recommendations on how to improve the outpatient therapy benefit under part B of title XVIII of the Social Security Act. The report shall include recommendations on how to reform the payment system for such outpatient therapy services under such part so that the benefit is better designed to reflect individual acuity, condition, and therapy needs of the patient. Such report shall include an examination of private sector initiatives relating to outpatient therapy benefits. ■

Introduction

Section 3005 of the Middle Class Tax Relief and Job Creation Act of 2012 (MCTRJCA) required the Commission to study the Medicare outpatient therapy benefit and make recommendations on how to improve the payment system (see text box). The law also directed the Commission to examine techniques used by private health plans to manage outpatient therapy benefits (see text box, p. 234). Underlying the Commission's mandate was the scheduled expiration at the end of 2012 of an exceptions process that allowed beneficiaries to receive outpatient therapy services above certain dollar limits, or "caps," which are set by law. To inform the Congress's work prior to this scheduled expiration of the caps' exceptions process, the Commission issued its recommendations to the Congress in November 2012. The recommendations in this report are based on information available and analysis completed by the Commission at that time.

To evaluate the recommendations for improving Medicare's outpatient therapy benefit, we considered each recommendation's effect on program spending, quality of care, and beneficiaries' access to care. We also considered whether they would advance payment reform—that is, move Medicare payment policy away from fee-for-service (FFS) payment and encourage a more integrated delivery system.

Definition of outpatient therapy

Outpatient therapy services include three separate categories of clinical services that aim to improve and restore function that patients have lost after an illness or injury and to help patients maintain improved function: physical therapy, occupational therapy, and speech–language pathology services. Descriptions of these services are as follows:

- ***Physical therapy*—**Restore and maintain physical function and treat or prevent further impairments that result from disease or injury. Treatment may include therapeutic exercise, manual therapy, patient education, and other interventions to improve strength and mobility, restore and maintain function, and increase independence. Examples of physical therapy outcomes include improved ability to stand, lift, carry, and walk independently.
- ***Occupational therapy*—**Restore and maintain the ability to conduct activities of daily living, such as bathing and dressing, and instrumental activities of daily living, such as food preparation and household management. Therapies may focus on motor skills, lifting, bending, feeding and swallowing, and time management. Outcomes may include bathing, dressing, and preparing a meal independently, with or without environmental modification or assistive technology.
- ***Speech–language pathology*—**Restore and maintain the ability to communicate, swallow, and speak. Speech–language pathology therapies include guided drills and training to improve speech and swallowing functions. Outcomes may include recovery of speech after a stroke (Centers for Medicare & Medicaid Services 2009).

Therapy services may be furnished by physicians or by physical therapists, occupational therapists, and speech–language pathologists in their respective disciplines. These services also may be furnished by physician assistants, nurse practitioners, and clinical nurse specialists, if permitted by the state in which the provider practices. Qualified physical and occupational therapy assistants may also provide therapy services when supervised by

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Management techniques used by private plans and other payers

The Middle Class Tax Relief and Job Creation Act of 2012 required the Commission to evaluate private sector initiatives for outpatient therapy. The Commission engaged NORC (formerly National Opinion Research Center) at the University of Chicago and Georgetown University to evaluate techniques that private health plans (including Medicare Advantage plans), integrated delivery systems, and private benefit managers use to manage their enrollees' outpatient therapy use. Our contractors interviewed representatives from 10 health plans and integrated delivery systems and three large private benefit managers regarding their approaches to payment methods, utilization management methods, and outcomes measurement.

The most common utilization management technique is to limit the number of visits a patient can receive, after which further therapy may be authorized after a review for medical necessity. Plans vary widely in the visit limits they set. A few plans require prior authorization before any therapy; others require review and authorization to receive more services after 6 to 8 visits; most require authorization to continue after 20 or 30 visits. The intensity of the authorization process also varies; some involve routine checks against benchmarks (such as the average number of visits for other therapists), while others involve a careful review of the medical record and plan of care by a physician, nurse, or therapist.

Cost sharing is another common management technique among plans and benefit managers. Copays are almost always paid per visit and range from $10 to $35 per visit. One plan that had experimented unsuccessfully with a prior authorization program indicated that it has a high per visit copay of $50 to manage this benefit.

Most health plans did not manage the benefit by conducting wide-scale claims or postpayment reviews. Some plans used these tools to investigate fraud and abuse, identify outlier providers, and conduct audit and payment adjustment activities.

Most private plans do not require the use of a standard tool to collect functional status or improvement data. Therapists are required to document improvement in their patients in the medical record using the tool of their choice, but those data are not submitted with claims to plans or benefit managers.

In addition to our contract with NORC and Georgetown to examine how private plans manage outpatient therapy, we also spoke with staff at the Veterans Health Administration (VHA) to learn about their management techniques. The VHA uses methods similar to those used in the private sector to manage outpatient therapy services. It does not require the use of standard tools to measure functional status and improvement but requires a certified plan of care that lasts no more than 60 days. While there are no visit limits, the VHA charges copayments for outpatient therapy services—$15 per visit for physical therapy and occupational therapy services and $50 per visit for specialized services. ■

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

physical and occupational therapists, respectively. Athletic trainers, chiropractors, nurses, and nurse aides do not meet Medicare's qualification and training requirements for therapists and therefore can neither provide nor bill Medicare for therapy services.

Many types of patients can benefit from outpatient therapy. For example, for people recovering from a stroke, physical therapy can facilitate the recovery of balance and strengthen a lower paretic limb (Van Peppen et al. 2004). Stretching and strengthening physical therapy exercises can improve symptoms associated with chronic lower back pain (Hayden et al. 2005). Further, physical therapy can reduce a beneficiary's risk of falling (Michael et al. 2010). Occupational therapy can improve a patient's ability to perform activities of daily living (Donnelly and Carswell 2002). For people with rheumatoid arthritis, for example, occupational therapy is effective in reducing pain (Steultjens et al. 2002). Several studies show that patients who receive occupational therapy after a stroke have a lower risk of death, deterioration, and dependency in personal activities of daily living (Legg et al. 2007). In addition, occupational therapy interventions for community-dwelling older adults, particularly those who

live alone, can improve their functional ability, social participation, and quality of life (Steultjens et al. 2004).

Intense speech therapy over a shorter time has been found to improve the speaking ability of patients who suffer from apahsia (difficulty speaking) following a stroke (Bhogal et al. 2003). For people with Parkinson's disease, speech therapy has been shown to improve vocal intensity and to decrease complaints of weak, monotonous, and unintelligible speech (de Angelis et al. 1997). Speech–language pathology services may also help patients restore communicative, cognitive, and swallowing function after a stroke or head injury or because of declining motor control (Robbins et al. 2008).

While outpatient therapy can improve outcomes for patients with certain conditions, the challenge for Medicare is ensuring that therapy services are delivered to the patients who will benefit from them. The Commission believes that Medicare needs to gather more clinical data on outcomes to better determine who needs therapy services and the relative effectiveness of their treatment.

Medicare's coverage of outpatient therapy

To be covered by Medicare, a beneficiary's need for physical therapy, occupational therapy, or speech–language pathology services must be documented in a written treatment plan developed by the beneficiary's therapist, a physician, or a nonphysician practitioner after consultation with a qualified therapist. The plan of care must be established prior to initiating treatment. The prescribed course of therapy must be reasonable and necessary to treat the individual's illness or injury.

Among other requirements, covered therapy services must:

- qualify as skilled therapy services appropriate for specific and effective treatment of the patient's condition, and
- be sufficiently complex and sophisticated such that the services required can be safely and effectively performed only by a qualified therapist or under the supervision of a qualified therapist (Centers for Medicare & Medicaid Services 2009).[1]

In the absence of detailed national coverage policy, each Medicare administrative contractor (MAC) has developed local coverage policies, called local coverage determinations, for outpatient therapy services provided to beneficiaries in their regions (text box, p. 237).

Characteristics of outpatient therapy users

In 2011, about 4.9 million beneficiaries (15 percent of FFS beneficiaries) received outpatient therapy services. Compared with the Medicare Part B FFS population, outpatient therapy users generally were older (73 years vs. 70 years), more likely to be women (64 percent vs. 55 percent), more likely to be White (87 percent vs. 83 percent), and more likely to be dually eligible for Medicare and Medicaid (28 percent vs. 20 percent).

The diagnosis codes used to bill therapy services tend to be nonspecific International Classification of Diseases, Ninth Revision (ICD–9) codes (e.g., pain in joint), and many are V codes, which are nondescriptive codes that reflect the services patients receive and not their clinical condition.[2] We classified ICD–9 codes into larger disease categories to determine the main clinical conditions of therapy beneficiaries (Elixhauser and McCarthy 1996). For physical and occupational therapy, the most frequent diagnosis categories are back problems, nontraumatic joint disorders, and connective tissue disorders (Table 9-1, p. 236). Speech–language pathology patients tend to have conditions largely classified as gastrointestinal disorders (related to difficulties with swallowing), and many suffer from delirium, dementia, and other cognitive disorders. Current data do not permit a more detailed description of the clinical conditions of Part B beneficiaries who use therapy services.

To measure patient severity, we used risk scores from the hierarchical condition categories (HCC) risk-adjustment model. HCC risk scores predict beneficiaries' relative costliness based on their diagnoses from the prior year and demographic information (e.g., age and sex) (Table 9-2, p. 236). In 2009, Medicare outpatient therapy users had a higher mean risk score (1.51) than all Medicare beneficiaries (roughly 1.0), indicating greater patient severity among therapy users. Physical therapy users had lower risk scores (1.47) than occupational therapy users (2.02) and speech–language pathology users (2.23). Of those who received therapy in a nursing facility, beneficiaries who were residents had higher risk scores (2.46) than nonresidents (1.78).[3]

Medicare payment policy for outpatient therapy services

In accordance with the Balanced Budget Act of 1997, Medicare pays for outpatient therapy services under the

EMBARGOED FOR RELEASE UNTIL 11:00 AM JUNE 14, 2013

TABLE 9–1 **Top five clinical categories by therapy type, 2009**

Clinical category	Share of total claims within therapy type
Physical therapy	
Back problem	27%
Other nontraumatic joint disorders	19
Other connective tissue disease	15
Osteoarthritis	9
Other nervous system disorders	7
Occupational therapy	
Other connective tissue disorder	16
Other nontraumatic joint disorders	12
Rehabilitation care, fitting for prostheses, adjustment of devices	9
Other nervous system disorders	9
Osteoarthritis	8
Speech–language pathology	
Other gastrointestinal disorders	24
Rehabilitation care, fitting for prostheses, adjustment of devices	14
Delirium, dementia, and amnestic and other cognitive disorders	7
Other nervous system disorders	7
Late effects of cerebrovascular disease	6

Note: Ranking is based on the number of claims from 2009 that fall under each clinical classification determined by the Agency for Healthcare Research and Quality software (Elixhauser and McCarthy 1996).

Source: MedPAC analysis of 100 percent Medicare Part B therapy claims, 2009.

fee schedule for physicians and other health professional services regardless of whether the services are provided in facilities or in professional offices. Under the fee schedule, most physical therapy and occupational therapy codes are defined in 15-minute increments, but most speech–language pathology services are not. Each service's procedure code has a separate payment rate that is determined by multiplying each code's relative weight—expressed as relative value units (RVUs)—by a standard dollar amount (the conversion factor). The resulting payment rate is then adjusted for geographic differences in input prices. Each service's RVUs include three components: (1) work, which accounts for the therapist's time and skill; (2) practice expense, which covers the cost of ancillary clinical staff (such as a physical therapy assistant or physical therapy aide), medical supplies, medical equipment, and overhead; and (3) professional liability insurance.[4]

Therapy services may be covered under Part B when they are provided in various settings—such as an outpatient rehabilitation facility, a therapist's office, a hospital, a critical access hospital, or a beneficiary's residence. Medicare beneficiaries who are hospital inpatients and who have exhausted their Part A–covered benefits may have medically necessary therapy services covered under the Part B outpatient therapy benefit. Part B also covers therapy for Medicare patients residing in a skilled nursing facility (SNF) whose stay is not covered by Part A and for nonresidents who receive outpatient rehabilitation services from the nursing facility. Similarly, outpatient therapy services that are delivered by home health agencies to beneficiaries who are not homebound, and therefore not receiving services under a home health plan of care, are paid for under the Part B fee schedule. Therapy services provided by home health agencies under a home health plan of care are covered under the home health prospective payment system.

As with other Part B benefits, Medicare beneficiaries are responsible for paying coinsurance for outpatient therapy services. This coinsurance is equal to 20 percent of the Medicare allowed amount for each service. Over 90 percent of beneficiaries in traditional FFS Medicare

TABLE 9–2 **HCC risk scores by outpatient therapy user group, 2009**

Therapy user group	Mean risk score
All Medicare outpatient therapy users	1.51
Physical therapy user	1.47
Occupational therapy user	2.02
Speech–language pathology user	2.23
Prior hospitalization (≤ 30 days before therapy)	1.72
No prior hospitalization	1.49
Nursing facility user (resident)	2.46
Nursing facility user (nonresident)	1.78

Note: HCC (hierarchical condition categories).

Source: MedPAC analysis of 100 percent Medicare Part B therapy claims, 2009.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

National and local coverage determinations for outpatient therapy

Medicare's coverage policies for outpatient therapy are broad. We examined national coverage determinations (NCDs) for outpatient therapy, which are issued by CMS, and local coverage determinations (LCDs), which are written by Medicare administrative contractors (MACs).[5] We identified few NCDs related to outpatient therapy. With the exception of speech–language pathology services, NCDs generally do not address the most common outpatient therapy services. An NCD for speech–language pathology covers these services for the treatment of dysphagia (a swallowing disorder that may be due to neurological, structural, or cognitive deficits). The NCDs for physical and occupational therapy are limited to specific services such as infrared therapy devices and neuromuscular electrical stimulation. For example, the NCD on infrared therapy devices does not cover their use for the treatment of symptoms related to peripheral sensory neuropathy and certain other conditions (Centers for Medicare & Medicaid Services 2012d).

We examined LCDs issued by eight MACs for outpatient therapy services. The LCDs allow broad coverage for the most common types of therapy services, and their coverage rules usually are consistent with one another. The most commonly billed outpatient therapy service is "therapeutic exercises to develop strength and endurance, range of motion, and flexibility" (Current Procedural Terminology (CPT) code 97110), and this service is considered medically necessary for many types of conditions. For example, one MAC, Trailblazer, covers therapeutic exercises for a loss or restriction of joint motion, strength, functional capacity, and mobility resulting from a disease or injury (Centers for Medicare & Medicaid Services 2012c). Similarly, the second most common therapy service—therapeutic activities (CPT 97530)—is considered medically necessary for patients needing a broad range of rehabilitative techniques.

Two MACs, Novitas and Trailblazer, limit the number of therapy services that can be provided per patient without a review of medical records. They allow 5 physical therapy or occupational therapy services per patient per day (each unit of service is 15 minutes) and 60 physical therapy or occupational therapy services per patient per month (Centers for Medicare & Medicaid Services 2012c). For services beyond these limits, these MACs require a review of medical records to determine medical necessity. Similarly, the Wisconsin Physicians Insurance Corporation states that therapy sessions longer than 60 minutes (i.e., 4 units of service), except for an evaluation, must be accompanied by documentation that supports the medical necessity of the duration of the session and the number of interventions performed (Centers for Medicare & Medicaid Services 2012a).

Some LCDs limit certain modalities, which are treatments that are sometimes used in association with therapeutic exercises and activities. For example, First Coast Service Options and Palmetto GBA limit coverage of therapeutic ultrasound (CPT 97035), which is a deep heating modality that uses sound waves to increase muscle, tendon, and ligament flexibility (Centers for Medicare & Medicaid Services 2012b). These MACs limit this modality to three or four treatments per week for one month.[6] ■

EMBARGOED FOR RELEASE UNTIL 12:01AM JUNE 14, 2013

have all or some of their Part B coinsurance liabilities covered by private supplemental insurance or Medicaid (Medicare Payment Advisory Commission 2012). Because of the extent of supplemental insurance coverage, many outpatient therapy users are insulated from cost sharing for their therapy services.

Outpatient therapy caps

To constrain excessive spending and utilization, the Congress enacted two caps on annual per beneficiary spending for outpatient therapy services: one for physical therapy and speech–language pathology services combined and another for occupational therapy services. The dollar amount of each cap was $1,880 in 2012 and $1,900 in 2013.[7] The caps are adjusted annually according to the change in the Medicare Economic Index. The annual cap amount is unrelated to the condition for which a particular beneficiary is receiving therapy. Consequently, the cap policy initially caused concerns that it could restrict access to medically necessary services.

TABLE 9–3

Distribution of Medicare spending on outpatient therapy services by percentile of users, 2011

	Allowed charges	
Percentile of users	Physical therapy and speech–language pathology	Occupational therapy
5	$70	$74
10	106	77
15	149	101
20	211	131
25	286	179
30	365	246
35	449	331
40	535	427
45	629	535
50	731	656
55	845	793
60	974	950
65	1,124	1,135
70	1,301	1,354
75	1,513	1,603
80	1,750	1,913
85	2,098	2,387
90	2,734	3,118
95	4,025	4,435
99	7,799	7,925

Note: Users in the 100th percentile were outliers, totaling $54,641 for physical therapy and speech–language pathology and $36,187 for outpatient therapy. Each therapy cap amount was $1,870 in 2011.

Source: MedPAC analysis of 100 percent Medicare Part B therapy claims, 2011.

In addition, therapy providers raised concerns that they would not know if a beneficiary was approaching the cap if the beneficiary also received services from other providers. Hospital outpatient departments (HOPDs) were initially excluded from the caps with the rationale that beneficiaries with high care needs would receive therapy services in that setting, but eventually they were included in the caps as well (Maxwell et al. 2001). These concerns led the Congress to suspend the caps from 2000 to 2005 (except for September 1, 2003, through December 7, 2003, when the provision suspending the caps expired). In 2006, the Congress reinstated the caps along with an exceptions process intended to address the beneficiary access and provider concerns. In 2011, between 80 percent and 85 percent of physical therapy and speech–language pathology therapy users had spending below the cap, and between 75 percent and 80 percent of occupational therapy users had spending below the cap (Table 9-3).

Exceptions process for therapy caps

As noted earlier, the Congress established an exceptions process in 2006 to allow beneficiaries to exceed the statutory per beneficiary annual spending cap if the responsible clinician certifies that continued therapy services are medically necessary. Patients who had qualifying conditions or complexities could use an automatic process to exceed the therapy caps. Patients who were not eligible for the automatic exceptions process could apply for a manual exception if they believed that they required services beyond the cap. In 2007, the exceptions process became fully automatic, allowing a clinician to certify the medical necessity of therapy services in excess of the cap by adding a modifier to the therapy procedure code on a claim. These claims are subject to manual review for medical necessity, but in practice, the frequency of these reviews and subsequent denials appears to be relatively low.[8]

Unlike the caps, the exceptions process expires periodically under current law unless explicitly reauthorized by the Congress. The Medicare and Medicaid Extenders Act of 2010 extended the therapy cap exceptions process from its original expiration date of December 31, 2010, until December 31, 2011; MCTRJCA extended it through December 31, 2012; and the American Taxpayer Relief Act of 2012 (ATRA) extended it through December 31, 2013.

Medical reviews for therapy services beyond a $3,700 threshold

In 2012, the Congress introduced additional reviews of therapy services for the highest spending beneficiaries. MCTRJCA required CMS to conduct manual medical reviews between October 1, 2012, and December 31, 2012, for therapy claims that exceeded a specified spending threshold. ATRA extended this requirement until December 31, 2013. Under this provision, CMS must review claims submitted on behalf of beneficiaries whose use of outpatient therapy services exceeded $3,700 in spending for physical therapy and speech–language pathology services combined or for occupational therapy services separately. The top 5 percent of outpatient therapy users in 2008 and 2009 reached this spending level.

Under the manual review process, CMS requires providers to obtain prior approval before delivering therapy services

EMBARGOED FOR RELEASE UNTIL 12:00 PM JUNE 14, 2013

The use of advance beneficiary notice of noncoverage

The advance beneficiary notice (ABN) informs a beneficiary that Medicare may not consider a given service to be medically reasonable and necessary for the patient in a particular instance and therefore may not cover the service and pay the usual 80 percent of the allowed charge. The information contained in an ABN is intended to allow a beneficiary to make an informed decision about whether to receive additional therapy services and to accept responsibility for payment in full for those services if Medicare does not cover and pay for them.

According to a provision of the American Taxpayer Relief Act of 2012, if a beneficiary has met his or her treatment goals but prefers to continue with therapy services for reasons that are unrelated to medical necessity, the provider must issue an ABN before the beneficiary can be held liable for the cost of the additional services. In order to be paid, the provider cannot bill the beneficiary directly; the claim must first be submitted to Medicare. If Medicare denies the claim based on an assessment that the services were not medically reasonable and necessary, the provider can then bill the beneficiary. If the provider fails to issue a valid ABN to the beneficiary, the provider may not bill the beneficiary for the services and assumes financial responsibility for those services if Medicare denies coverage. ■

beyond the $3,700 threshold. Providers' requests—submitted by mail or by fax to their MAC—must include certain administrative information regarding the beneficiary, the provider certifying the care, the provider performing treatment, and dates of service. Requests also have to include justification for the additional services, objectives and measurable goals, other documentation required by local coverage determinations, progress reports, treatment notes, and other information requested by the MAC.

The provider can request approval for additional therapy in increments of 20 treatment days. Once approval is granted, the provider can continue to deliver therapy services for the number of days approved by the MAC. If the approval is not granted, Medicare will not pay for additional services. If the provider chooses to deliver additional services before a request is approved, the beneficiary could be liable for the cost of those services if the request is denied and if the beneficiary has been issued an advance beneficiary notice (see text box).

Because of the limited methods available for providers to submit requests (via fax or mail only) and the amount of documentation required by the MACs, some providers reported spending many hours submitting requests, which may have caused delays in care. Providers may submit their requests for approval up to two weeks before the patient would exceed the $3,700 threshold in order to minimize such delays. CMS reported that some providers submitted requests with incomplete information—for example, without the name of the beneficiary or provider—which led to denials that could delay the provision of therapy.

Medicare spending on outpatient therapy services

In 2011, Medicare spending on outpatient therapy totaled $5.7 billion for services provided to 4.9 million beneficiaries (Table 9-4, p. 240). Spending on physical therapy ($4.1 billion) accounted for about two-thirds of all therapy services; this proportion has been relatively stable over time. Spending on occupational therapy and speech–language pathology services totaled about $1.1 billion and $540 million, respectively. In 2011, about 15 percent of Part B beneficiaries used therapy services, and the average Part B payment per therapy user was just under $1,200. The number of days (from the first date of service to the last) of an episode of care averaged 33 days across all therapy types.

The sites where outpatient therapy services are furnished shifted somewhat from 2004 to 2011 (Figure 9-1, p. 240). In 2004, Medicare spent about $4.3 billion on outpatient therapy services. Payments to physical therapists in private practice accounted for almost one-quarter of Medicare spending in that year. Among facilities, nursing facilities made up the largest share of therapy spending, followed

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

TABLE 9–4

Spending for and utilization of Medicare outpatient therapy services, 2011

		Spending			Utilization		
	Number of beneficiaries (in millions)	Total (in billions)	Share by type	Per user	Per user service counts	Mean number of visits per user	Mean length of episode (in days)
Physical therapy	4.3	$4.1	71%	$942	47	13	34
Occupational therapy	1.1	1.1	19	1,026	48	14	28
Speech–language pathology	0.6	0.5	10	981	18	12	34
Total	4.9	5.7	100	1,173	54	16	33

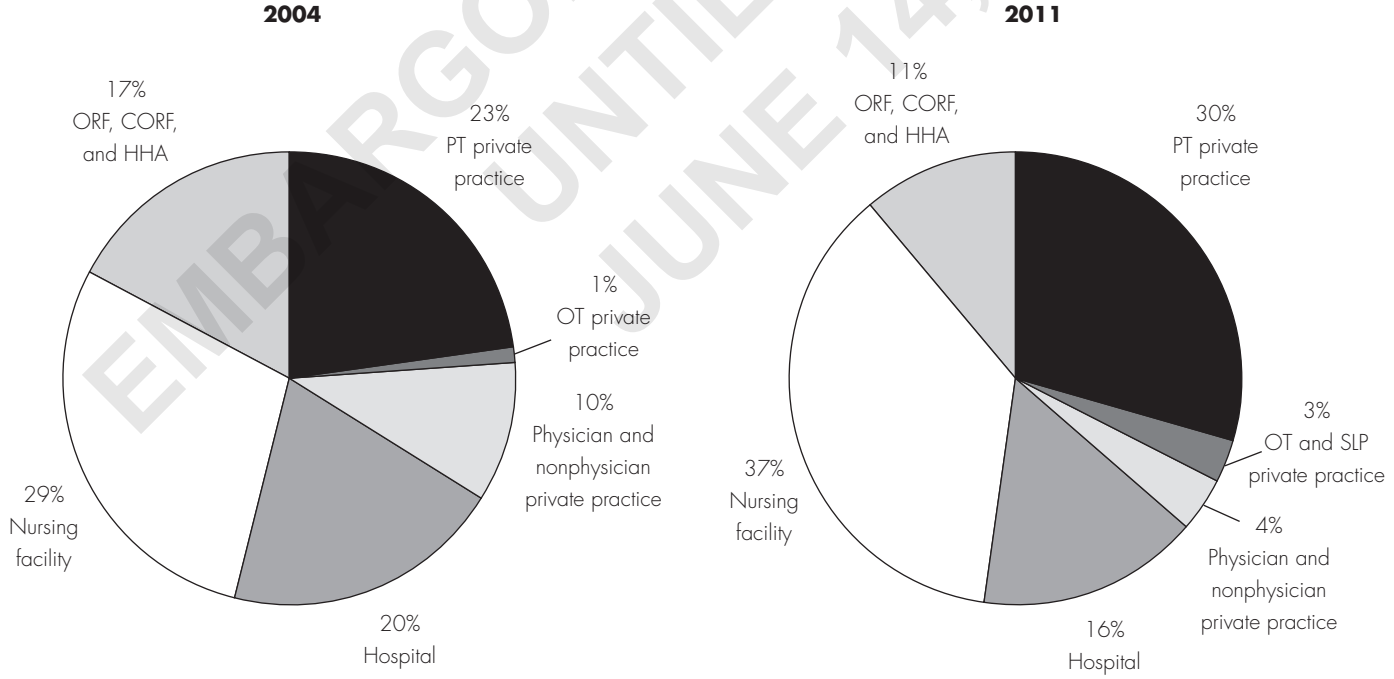
Note: Totals include beneficiaries who use multiple therapy types. Total number of beneficiaries is an unduplicated count. Service counts are miles/time/units/services (Medicare physician fee schedule) and revenue center unit (facility) counts. Per user service counts show the number of 15-minute service codes billed per user for occupational and physical therapy. Most speech–language pathology service codes are not defined in 15-minute timed increments. An episode begins with the first therapy service provided during the year and ends after a 30-day period during which there are no additional therapy services.

Source: MedPAC analysis of 100 percent Medicare Part B therapy claims, 2011.

by HOPDs, outpatient rehabilitation facilities, and home health agencies. From 2004 to 2011, the shares of spending grew for physical therapists in private practice and nursing facilities, while shares shrank in physicians' offices, outpatient rehabilitation facilities, home health agencies, and hospitals. In 2011, spending on outpatient therapy services in facility settings was most often provided in nursing facilities (37 percent of total spending). Spending in nonfacility settings was driven by physical therapists in private practice (30 percent of total spending).

FIGURE 9–1

Distribution of outpatient therapy spending by setting, 2004 and 2011



Note: ORF (outpatient rehabilitation facility), CORF (comprehensive outpatient rehabilitation facility), HHA (home health agency), PT (physical therapy), OT (occupational therapy), SLP (speech–language pathology). Totals may not sum to 100 percent due to rounding.

Source: MedPAC analysis of 100 percent Medicare Part B therapy claims, 2004 and 2011.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

TABLE 9–5 **Medicare spending for outpatient therapy services, 2004–2011**

Year	Medicare spending (in billions)	Share of all FFS Part B beneficiaries who used therapy	Average spending per user	Annual change in per user spending
2004	$4.3	13%	$994	
2005	N/A	N/A	N/A	N/A
2006	4.1	13	926	N/A
2007	4.4	14	999	8%
2008	4.8	14	1,057	6
2009	5.3	14	1,165	10
2010	5.6	15	1,182	1
2011	5.7	15	1,173	0

Note: FFS (fee-for-service), N/A (not available).

Source: MedPAC analysis of Medicare claims data and CMS contractor reports.

EMBARGOED FOR RELEASE UNTIL 12:00PM JUNE 14, 2013

Growth in spending for outpatient therapy services

Overall, annual growth in spending on therapy services has been highly variable since 2004 (Table 9-5). Medicare spending per therapy user grew by 10 percent between 2008 and 2009 but remained constant between 2010 and 2011. The share of FFS beneficiaries who used therapy grew slightly from 13 percent in 2004 to 15 percent in 2011. The number of FFS beneficiaries using outpatient therapy increased by 10 percent between 2004 and 2011 even though FFS enrollment overall was virtually unchanged during this period.

From 2009 to 2011, spending grew more slowly than in prior years and may reflect recent trends in the overall growth rate of Part B spending and health care spending in general. For example, total Medicare Part B spending grew by an annual average rate of 8 percent from 2005 to 2009 but slowed to 5 percent from 2009 to 2011 (Boards of Trustees 2012).

For much of the time that per beneficiary therapy spending caps have been in effect, the caps have been legislatively suspended or exceptions have allowed for substantial spending above the caps. The caps first took effect in 1999 and produced a noteworthy drop in per user spending relative to the preceding year (Figure 9-2, p. 242). From 2000 through 2005, the caps were suspended except for three months in 2003, and spending increased dramatically. In 2006, the therapy caps were reinstated and CMS implemented a two-part exceptions process to the caps that involved automatic and manual exceptions (Medicare Payment Advisory Commission 2006). Per user spending dropped in 2006 relative to 2004. Since the exceptions process became completely automatic in 2007, per user spending increased each year until 2011. These changes in spending from 1998 to 2011 demonstrate that, in the absence of clear directives from the program regarding the appropriate indications for outpatient therapy, providers appear to respond rapidly to changes in payment policy (similar to the responsiveness of SNFs and home health agencies to changes in Medicare payment policy for therapy services provided in the SNF and home health payment systems). This provider responsiveness raises questions about potential overuse of outpatient therapy services.

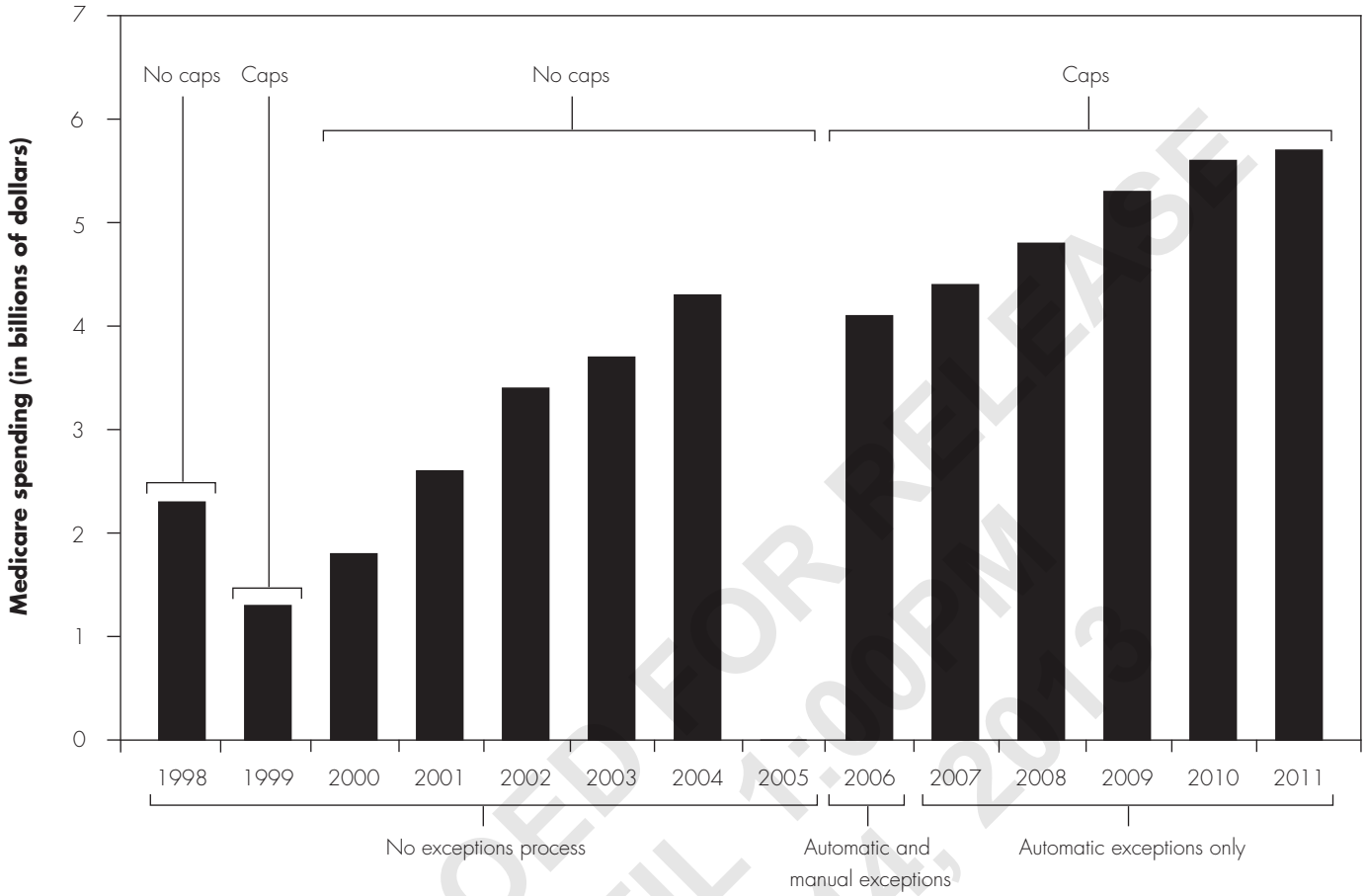
Geographic variation in spending on outpatient therapy

In 2011, Medicare spending on therapy services averaged $1,173 per user, but the top-spending counties spent five times as much per user as the bottom-spending counties, adjusting for differences in health status ($2,588 vs. $513). These findings raise questions about possible inappropriate use of the outpatient therapy benefit in some geographic areas.

Seven counties in Louisiana and 8 counties in Texas are among the 20 highest spending counties in the country (Table 9-6, p. 243). For example, Medicare spent almost $3,600 per beneficiary on outpatient therapy services in St. Mary's County, LA—more than three times the national average ($1,173). Spending on outpatient therapy services

FIGURE 9–2

Total Medicare spending on outpatient therapy services, 1998–2011



Note: Caps were in effect for a brief period from September 1, 2003, through December 7, 2003. Data were not available for 2005.

Source: MedPAC analysis of Medicare claims data and CMS contractor reports.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

in Kings County and Queens County, NY, was also above the national average in 2011, accounting for $2,798 and $2,278 per user, respectively. These counties, which include the New York City boroughs of Brooklyn and Queens, have a combined total of about 77,000 Medicare therapy users, or 80 percent of the total number of therapy users in the 20 top-spending counties. More than 20 percent of all Part B beneficiaries in Kings County and Queens County are users of outpatient therapy services, which is higher than the national average of 15 percent. At these spending and use rates, overuse and potential fraud and abuse are concerns.

A noteworthy difference from earlier years (e.g., 2008 and 2009) is that Miami–Dade County, FL, was not a high-spending area in 2011. In 2009, Miami–Dade was the highest spending area in the country, with $4,500 in risk-adjusted spending per therapy user. In 2011, Medicare spent just under $2,000 per therapy user in Miami–Dade County. The significant drop in spending could be a result of recent press coverage and regulatory focus on fraud and abuse in outpatient therapy services in Miami–Dade. In December 2010, the *Wall Street Journal* published a story that highlighted a family practice physician in the Miami area who billed Medicare more than $1.2 million in 2008 alone (Schoofs and Tamman 2010). A large portion of his payments were for outpatient therapy services. The *Wall Street Journal* story also noted other physicians who billed for therapy at much higher rates than the average physician regularly billed for conditions that were extremely rare in the Medicare or even U.S. population, and whose Medicare

TABLE 9–6 **Twenty counties with the highest spending on outpatient therapy, 2011**

	State	County	Per user spending	Number of therapy beneficiaries	Share of FFS beneficiaries living in county who used therapy
National			$1,173	4.9 million	15%
1	LA	St. Mary's	3,582	759	10
2	TX	Jim Wells	3,293	515	11
3	LA	Avoyelles	2,799	685	10
4	NY	Kings	2,798	41,973	24
5	TX	Rusk	2,696	731	10
6	PA	Lawrence	2,653	1,193	16
7	TX	San Patricio	2,609	852	14
8	MS	Lincoln	2,581	781	13
9	TX	Hardin	2,550	662	10
10	LA	Lincoln	2,501	656	13
11	TX	Atascosa	2,492	521	12
12	TX	Angelina	2,490	1,385	11
13	FL	Okeechobee	2,478	763	16
14	TX	Upshur	2,461	537	9
15	LA	Iberia	2,328	1,067	10
16	LA	Ouachita	2,323	1,939	10
17	LA	Livingston	2,294	1,070	14
18	TX	Cherokee	2,285	684	9
19	NY	Queens	2,278	34,753	21
20	LA	Caddo	2,261	3,919	12

Note: FFS (fee-for-service). These counties had at least 500 Part B beneficiaries with spending for outpatient therapy services in 2011. Spending is risk adjusted for county health status using hierarchical condition categories risk scores.

Source: MedPAC analysis of 100 percent Medicare Part B therapy claims, 2011.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

payments for outpatient therapy rose by millions of dollars in a year or two.

In 2010, the Office of Inspector General (OIG) at the Department of Health and Human Services reported on the growth in spending on outpatient therapy in the Miami–Dade area (Office of Inspector General 2010). The report cited therapy providers in the area who were engaging in questionable practices, such as high rates of billing above therapy caps. OIG recommended that CMS and its MACs:

- Monitor claims from high-use areas and perform further reviews and target claims with questionable billing practices (e.g., providing therapy to a high percentage of beneficiaries for all four quarters of a given year or consistently providing more than eight hours of outpatient therapy to a beneficiary on a single day).
- Review claims with questionable billing based on geographic location.
- Revise the therapy caps exceptions process.

Spending is much higher for beneficiaries who exceed the caps

In 2011, 19 percent of therapy users received services beyond the per beneficiary caps on spending (Table 9-7, p. 244). As expected, spending on and utilization by beneficiaries who exceeded the caps were dramatically higher than that of below-cap therapy users. For example, among the 19 percent of physical therapy and speech–language pathology users who exceeded the cap, average spending per user was $3,013, more than five times the spending average for below-cap physical therapy and speech–language pathology users ($542). Of the 22 percent of occupational therapy users who exceeded the

TABLE 9–7 **Spending for therapy users who did and did not exceed therapy caps, 2011**

	All users	PT and SLP users	OT users
Number of therapy users (in millions)	4.9	4.6	1.1
Percent who exceeded caps	19%	19%	22%
Mean spending			
Users who exceeded therapy cap	$3,698	$3,013	$3,026
Users who did not exceed therapy cap	576	542	475
All users	1,173	1,009	1,026

Note: PT (physical therapy), SLP (speech–language pathology), OT (occupational therapy). Spending excludes beneficiary cost sharing. In 2011, each cap was $1,870, which includes both program spending and beneficiary cost sharing. The program spending portion of each cap was $1,496. User counts for PT and SLP users and for OT users do not add to the "all users" total since beneficiaries can be counted under both the PT and SLP count and the OT count.

Source: MedPAC analysis of 100 percent Medicare Part B therapy claims, 2011.

cap, average spending per user was $3,026, more than six times the average spending for below-cap occupational therapy users ($475). The share of therapy users who receive services that exceed the caps has grown over time. For example, in 2008, 15 percent of physical therapy and speech–language pathology users exceeded the cap, compared with 19 percent of users in 2011.

Beneficiaries who exceeded the caps received many more visits for a given diagnosis than other therapy users. Further, these users tended to be older and dually eligible for Medicare and Medicaid, but without further information it is difficult to determine the degree to which service provision beyond the caps is driven by the clinical complexity of these patients and their functional status.

Recommendations

The following sections present the Commission's recommendations, their rationale, and their implications using the four criteria outlined earlier in the chapter: the effect on program spending, the potential to improve beneficiaries' access to care, the impact on quality of care, and the potential to advance payment reform—that is, move Medicare payment policy away from FFS payment and encourage a more integrated delivery system.

These recommendations were transmitted to the Congress in November 2012. Therefore, the estimated budget impacts described in this report assume adoption of the recommendations by January 1, 2013.

Ensure program integrity for outpatient therapy

The Medicare program currently lacks clear clinical guidelines as to who needs outpatient therapy, how much therapy they should receive, and how long they need services. In addition, there is limited physician oversight to determine a patient's clinical progress and whether services continue to be necessary. Data with which to judge the clinical necessity of therapy services are not collected by the Medicare program. Under these circumstances, Medicare has few tools to constrain excessive use of and spending for outpatient therapy services. In addition, after adjusting for health status, use of outpatient therapy varies across the country, suggesting inappropriate use in areas where spending far exceeds the national average. Many of the geographic areas with high spending on therapy have been associated with overuse and abuse in other Medicare sectors, such as durable medical equipment and home health care. Payment edits based on established national guidelines for appropriate therapy are needed to target aberrant therapy billers and identify geographic areas where abuse of the benefit is suspected.

To increase physician oversight of outpatient therapy plans of care, Medicare should reduce the certification period for therapy plans of care from 90 days to 45 days. A certification period of 45 days is higher than the national average therapy episode of 33 days but half of the current Medicare certification period (Table 9-4, p. 240). Once physicians or nonphysician practitioners have certified plans of care, they are not required to monitor whether the plans are carried out, nor are they

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

responsible for the amount of therapy provided. The lack of accountability creates the potential for unnecessary therapy services. While reducing the certification period from 90 days to 45 days may increase physician visits associated with an episode of care, it should also increase physician oversight of the plan of care by requiring that a physician see the patient to ascertain the continued necessity of therapy.

The Patient Protection and Affordable Care Act of 2010 granted the Secretary authority to address fraud and abuse in geographic areas and among providers who exhibit aberrant billing patterns. Under this new authority, the Secretary can place a temporary moratorium on enrollment of new providers, require providers to re-enroll, implement payment edits, and suspend payments altogether for providers whose billings show potential fraud. Increased scrutiny of therapy services delivered in geographic areas prone to inappropriate use is also consistent with a recent OIG recommendation on outpatient therapy (Office of Inspector General 2010).

Staff at one MAC with whom we spoke implemented payment edits and additional reviews of therapy claims that exhibit aberrant billing patterns, such as multiple therapy types (e.g., physical and occupational therapy) delivered to a single patient on the same day, and therapy spending on the same patient that exceeded two and a half times the therapy cap. This MAC also conducted site visits in two counties to verify the presence and legitimacy of therapy providers after they enrolled in Medicare.

CMS should develop national guidelines that set reasonable limits on service use to curtail excessive provision of outpatient therapy services and establish national payment edits based on these guidelines. CMS currently has some national payment edits for outpatient therapy that limit the number of untimed codes (e.g., evaluation codes) to one per session (Centers for Medicare & Medicaid Services 2006). Our recommendation would require CMS to develop guidelines and edits on the number of timed services (which compose the majority of outpatient therapy services) that patients could receive per visit. The guidelines should be based on a reasonable amount of therapy that the average beneficiary can tolerate in an outpatient setting on a given day. Two MACs currently limit the number of timed therapy services per day to 5, or about 75 minutes per day (see text box, p. 237).

Similarly, CMS should direct its MACs to conduct focused reviews of the services provided in geographic areas with a high use of therapy and profile providers who bill for therapy services at rates that far exceed those of similar providers. For example, MACs could focus on providers with a high share of patients who receive therapy for an extended period or who consistently exceed therapy caps. In reviewing areas of the country where there is evidence of systematic overuse and potential fraud, MACs could focus resources on those areas and reduce the burden on providers in areas where there is little evidence of inappropriate use. MACs should also conduct site visits for new therapy providers in these geographic areas to determine whether they are legitimate operations with the appropriate staff and necessary equipment consistent with the therapy services they deliver.

RECOMMENDATION 9-1

The Congress should direct the Secretary to:

- **reduce the certification period for the outpatient therapy plan of care from 90 days to 45 days, and**
- **develop national guidelines for therapy services, implement payment edits at the national level based on these guidelines that target implausible amounts of therapy, and use authorities granted by the Patient Protection and Affordable Care Act of 2010 to target high-use geographic areas and aberrant providers.**

RATIONALE 9-1

This recommendation would increase physicians' oversight of the patient's plan of care. It would also help restrain inappropriate use of therapy services through national guidelines and payment edits and by targeting high-use geographic areas.

IMPLICATIONS 9-1

Spending

- Based on the experience of recent program integrity activities regarding outpatient therapy, we would expect that increased physician oversight of the use of therapy and narrowing the gap between the highest spending areas and the nationwide average would reduce unnecessary program spending. Some of this reduction may be offset by an increase in the number of physician visits paid under Part B if beneficiaries who reach the 45-day limit on the certification period want to continue with their treatment.

Access

- We do not expect this recommendation to adversely affect beneficiaries' access to necessary outpatient therapy services.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

TABLE 9–8

Distribution of Medicare outpatient therapy spending per user among occupational therapy users, 2011

Amount per user	Percent of: Occupational therapy beneficiaries	Medicare spending on occupational therapy
< $1,200	67%	21%
$1,200–$1,440	5	6
$1,440–$1,800	7	9
> $1,800	21	64

Note: Dollar values shown are allowed charges based on Medicare program payment amounts.

Source: MedPAC analysis of 100 percent Medicare Part B therapy claims, 2011.

Quality

- We cannot assess the impact of this recommendation on the quality of outpatient therapy services provided to Medicare beneficiaries since the program does not currently collect robust quality measures.[9]

Delivery system reform

- We anticipate that this recommendation will have no implications for delivery system reform.

Balance beneficiaries' access to outpatient therapy services with the need to manage program spending

While we have identified program integrity weaknesses in Medicare's outpatient therapy benefit, the Commission recognizes that outpatient therapy services can be an important part of the care beneficiaries need to restore and maintain their level of function and live independently. At the time the Commission forwarded its recommendations to the Congress, hard caps without exceptions for receiving services above those caps were scheduled for implementation starting January 1, 2013. Placing such an absolute limit on therapy services would be inconsistent with the goal of ensuring appropriate access to important services for beneficiaries.

To mitigate the hard cap on spending for outpatient therapy services, the Commission's four-part recommendation seeks to strike a balance between managing spending on therapy services and ensuring that beneficiaries continue to have access to needed services. The recommendation would (1) reduce the therapy cap for physical therapy and speech–language pathology services combined and the separate cap for occupational therapy to $1,270 in allowed charges in 2013; the caps should continue to be updated each year according to the Medicare Economic Index; (2) implement a manual review process for requests to exceed cap amounts and provide resources to CMS for this purpose; (3) permanently include services delivered in hospital outpatient departments under the therapy caps; and (4) apply a multiple procedure payment reduction of 50 percent to the practice expense portion of outpatient therapy services provided to the same patient on the same day. The Commission also identified three additional tools that could be used if spending on outpatient therapy is projected to be above current law and the Congress wishes to further constrain spending (see text box). These options are not part of Recommendation 9-2.

Reduce therapy cap limits to $1,270 in 2013

In 2012, the spending cap for physical therapy and speech–language pathology services combined and the separate cap for occupational therapy was $1,880 in allowed charges ($1,496 in program payments).[10]

Reducing the therapy cap to $1,270 (in allowed charges) for physical therapy and speech–language pathology services combined and for occupational therapy separately would accommodate the annual therapy needs of most beneficiaries while providing a check on excessive utilization. This number was chosen using historical spending trends. The reduced cap would permit about two-thirds of therapy users to receive therapy services without exceeding the caps and without any need to obtain exceptions to use additional services. Caps set at $1,270 in allowed charges would allow for roughly 14 physical therapy and speech–language pathology visits and 14 visits for occupational therapy before users reached either cap. The two caps combined would permit up to 28 visits for all outpatient therapy services per year—although the benefit is not administered as a combined cap for all three services. This amount is within the range of 20 to 30 visits allowed by many private plans before providers are required to obtain authorization to deliver additional services (see text box, p. 234).

If the therapy cap were reduced even lower to $1,200, 67 percent of occupational therapy users would be unaffected (Table 9-8). Further, users who spend above $1,200 on occupational therapy represent a disproportionate amount of spending—33 percent of occupational therapy users spent more than $1,200 but represented 79 percent of Medicare spending on occupational therapy in 2011. The distribution of occupational therapy–only users is similar

EMBARGOED FOR RELEASE UNTIL 6:00PM JUNE 14, 2013

Additional tools to address spending growth for outpatient therapy services

The Commission identified three tools that could be used if Medicare spending for outpatient therapy is projected to be above current law and the Congress wishes to further reduce this spending. They are as follows:

- ***Lower payment rates*—**Lowering providers' per service payment rates could reduce spending and potentially reduce the need for manual reviews above the spending caps. Payment rates could be reduced by a certain amount (e.g., 20 percent) when spending per episode exceeds a certain threshold (e.g., 75th percentile of the distribution of therapy spending per user). For example, payment rates could start to decline after spending reaches the 75th percentile.
- ***Further reduce therapy caps*—**Lowering thresholds for the outpatient therapy caps would further reduce spending. Requests for additional services, subject to manual medical review, would be permitted in order to ensure access to necessary services above cap levels. Under this option, CMS and its Medicare administrative contractors would likely experience an increase in the number of manual reviews relative to Recommendation 9-2, which would increase their workload.
- ***Increase beneficiaries' cost sharing for longer episodes*—**Increased cost sharing for beneficiaries with longer episodes could encourage more judicious use of therapy and could lower program spending on outpatient therapy services. Higher levels of cost sharing could encourage beneficiaries to more carefully assess the value of these services. The increased cost-sharing increments could be set so that they would not apply to the majority of beneficiaries.

  A new cost-sharing requirement could be linked to the number of visits per episode and rise incrementally with an increase in visits. For example, beneficiaries could be responsible for the standard 20 percent coinsurance for the first 20 visits of an episode. Subsequent blocks of visits (e.g., the next five visits) could be subject to 25 percent coinsurance, and an additional five visits could be subject to 30 percent coinsurance. (The initiation of a new episode of care after prior use of therapy services would revert back to the standard coinsurance rate of 20 percent.)

  However, in an environment where supplemental plans continue to cover most beneficiaries' costs, the effect of higher coinsurance on therapy services would be limited. Supplemental insurance plans would eventually cover the higher cost sharing, and beneficiaries would pay higher premiums for supplemental plans. Beneficiaries covered under Medicaid would similarly be protected from additional out-of-pocket costs. Therapy users would continue to be largely insulated from the cost of additional therapy services unless measures were taken to preclude third-party payers from covering beneficiaries' cost sharing above a certain level. ■

EMBARGOED FOR RELEASE UNTIL 4:00 P.M. JUNE 14, 2013

to the distributions for physical therapy and speech–language pathology users.

Adopt a streamlined manual medical review of requests to exceed therapy cap limits

Medicare needs a streamlined process to review claims that exceed either of the therapy caps.[11] From October through December 2012, CMS conducted manual medical reviews for services above the $3,700 threshold. There were several issues regarding the reviews, including delays in processing requests and delays in approvals due to difficulties with submissions by mail and fax.

To conduct a more efficient and effective manual medical review, the process should allow for the following:

- MACs should accept requests for medical reviews electronically in addition to mail and fax.
- Providers should receive immediate confirmation that their requests have been received.
- Reviews should be completed and acceptances and denials should be issued within 10 business days.
- Within the 10 days, beneficiaries should be allowed two visits for which the therapist bears financial

responsibility if services are deemed medically unnecessary.

- Consider having one or two MACs conduct all manual medical reviews nationwide for consistency in the review process.

CMS will need additional resources to successfully implement a streamlined medical review of requests to exceed cap levels. Without the needed resources, CMS will be unable to process and approve requests to exceed the caps in a timely manner. Streamlining the review process will make the decision to continue (or not continue) therapy services more consistent and transparent because providers could justify the need for additional therapy services and MACs could use national guidelines to evaluate these requests (see Recommendation 9-1)

Include hospital outpatient departments under therapy caps

The Congress initially excluded HOPDs from the therapy caps to preserve access for beneficiaries who needed additional therapy services after reaching the annual caps threshold (before an exceptions process was adopted). As of October 1, 2012, services provided in HOPDs are counted toward the caps. However, with our recommendation to adopt a permanent, streamlined review process for requests to exceed the caps, beneficiaries would receive services above the spending cap when medically necessary regardless of the setting. The Congress should apply the policy of annual caps to all therapy settings—including HOPDs—to ensure that no setting has an unfair advantage.

Increase the multiple procedure payment reduction for practice expense portion of outpatient therapy services

Medicare currently applies a multiple procedure payment reduction (MPPR) to the practice expense component of therapy services when multiple services are furnished by the same provider to a patient on the same day. The rationale for the MPPR policy is that efficiencies in practice expense occur when multiple therapy services are furnished in a single session because certain clinical staff activities are not performed twice, such as cleaning the room and equipment, greeting and gowning the patient, obtaining patient measurements, conducting patient education, and coordinating home care. In addition, there are efficiencies in the use of certain supplies during the patient visit.

Although the RVUs of many therapy services already account for some duplications in practice expense, CMS recently found that the current practice expense values do not reflect substantial efficiencies (Centers for Medicare & Medicaid Services 2011). Many therapy services were originally valued based on the assumption that three units of service (two procedures and one modality) were provided per visit. However, CMS determined that four was the median number of therapy services on claims with multiple units of service. This means that the clinical staff time associated with an activity that occurs once per visit (such as greeting and gowning the patient) should be spread across more units of service, and the amount of time allocated to each unit should be lower. In the Part B rule for 2011, CMS examined five high-volume pairs of therapy codes billed in a single session and found efficiencies in clinical labor and supplies that justified reductions to the practice expense payment ranging from 28 percent to 56 percent for the lower paid code (Centers for Medicare & Medicaid Services 2010b).

Based on this analysis, CMS proposed a 50 percent reduction to the practice expense payments for the second and subsequent therapy services. CMS received many public comments opposed to this policy. Consequently, in the final Part B rule for 2011, CMS adopted a 25 percent reduction as an "appropriate and conservative first step" (Centers for Medicare & Medicaid Services 2010a). However, CMS maintained its view that, based on its analysis, a 50 percent reduction may be appropriate. The MPPR applies to therapy services provided in both private practice settings (such as therapists' offices) and facility settings (such as HOPDs and nursing facilities) because the fee schedule determines the payment amounts for therapy in all settings. CMS was required by statute to implement this policy in a budget-neutral manner for therapy services provided in private practice settings; therefore, the savings from therapy delivered in these settings were redistributed to other fee schedule services. However, the statute does not require CMS to redistribute savings from therapy services provided in facility settings to other services; therefore, these savings reduced aggregate Medicare spending.

The Physician Payment and Therapy Relief Act of 2010 changed the MPPR reduction from 25 percent to 20 percent for outpatient therapy provided in private practice settings but maintained the 25 percent reduction for facility settings. This legislation also mandated that the savings from therapy services provided in private practice settings would no longer be budget neutral (i.e., the savings would not be redistributed to other fee schedule services).

Based on CMS's analysis of the efficiencies that occur when multiple therapy codes are provided in a single

EMBARGOED FOR RELEASE UNTIL 12:01AM JUNE 14, 2013

session, which justified reductions to the practice expense payment ranging from 28 percent to 56 percent for the lower paid code, the Commission recommends applying a uniform 50 percent MPPR to therapy services provided in all settings. Similar to the current reduction of 20 percent or 25 percent, the 50 percent reduction should apply to all therapy services furnished by the same provider to the same patient on the same day. In addition, the savings from the 50 percent reduction should be used to partly offset the cost of eliminating a hard cap on therapy spending. This recommendation is consistent with previous Commission recommendations that Medicare apply an MPPR to multiple imaging services that are provided during the same session (Medicare Payment Advisory Commission 2011b, Medicare Payment Advisory Commission 2005).

Consistent with the current MPPR for therapy services, a 50 percent MPPR should apply to all services furnished by the same provider to the same patient on the same day, even if the services are furnished in more than one session on that day or if services are in different therapy disciplines. As CMS discussed when it finalized the current MPPR policy, some practice expenses (such as patient education) overlap when multiple therapy sessions are provided on a single day to the same patient (Centers for Medicare & Medicaid Services 2011).

Another issue is whether the MPPR should apply when services from multiple therapy disciplines (e.g., physical therapy and occupational therapy) are furnished by the same provider to the same patient on the same day. CMS found that this scenario is uncommon but when it occurs, the MPPR policy should still apply because certain activities overlap, such as greeting the patient, obtaining vital signs, and making postvisit phone calls.

In addition to increasing the MPPR, CMS could also begin to combine therapy codes that are commonly performed together into single comprehensive codes. The payment rates for these comprehensive codes should reflect efficiencies associated with performing multiple therapy services during the same visit. CMS has recently done this for other types of services, such as certain imaging studies and procedures (Medicare Payment Advisory Commission 2011a).

RECOMMENDATION 9-2

To avoid caps without exceptions, the Congress should:

- **reduce the therapy cap for physical therapy and speech–language pathology services combined and the separate cap for occupational therapy to $1,270 in 2013. These caps should be updated each year by the Medicare Economic Index.**
- **direct the Secretary to implement a manual review process for requests to exceed cap amounts, and provide the resources to CMS for this purpose.**
- **permanently include services delivered in hospital outpatient departments under therapy caps.**
- **apply a multiple procedure payment reduction of 50 percent to the practice expense portion of outpatient therapy services provided to the same patient on the same day.**

RATIONALE 9-2

The Commission believes that a policy of hard caps on therapy spending without an exception may unduly compromise beneficiaries' access to medically necessary services. However, the current automatic exceptions process may be too loose and permit the delivery of excessive amounts of therapy without any way to establish the necessity of these treatments. This recommendation for a manual review of therapy claims exceeding the spending caps offers a middle ground.

IMPLICATIONS 9-2

Spending

- At the time this recommendation was approved, we expected that it would result in an increase in Medicare spending relative to current law, which mandated a cap without an exceptions process. The recommendation would restrain spending by reducing the cap amount and increasing the MPPR, but these savings would likely be offset by the cost of additional outpatient therapy services that would be permitted through a manual review process.

Access

- We expect higher use of outpatient therapy services relative to a therapy cap without exceptions. Further, the manual medical review would permit beneficiaries who need greater amounts of therapy to receive it, while deterring overuse.

Quality

- We cannot assess the impact of this recommendation on the quality of outpatient therapy services provided to beneficiaries because the program does not currently collect robust quality measures.

Delivery system reform

- We do not anticipate that this recommendation will significantly affect delivery system reform.

EMBARGOED FOR RELEASE UNTIL 1:00 PM JUNE 14, 2013

TABLE 9–9 **Top 10 ICD–9 codes for all outpatient therapy, 2011**

ICD–9 code	Code description	Total payments (in millions)	Percent of total payments
V57.1	Nonspecific, other physical therapy	$466	8%
728.87	Muscle weakness (generalized)	278	5
724.2	Lumbago, low back pain	276	5
781.2	Abnormality of gait	265	5
719.7	Difficulty in walking	233	4
V57.89	Other, multiple training or therapy	216	4
719.41	Pain in joint, shoulder region	165	3
719.46	Pain in joint, lower leg	151	3
723.1	Cervicalgia (pain in neck)	109	2
781.3	Lack of coordination	107	2
	Total	2,267	40

Note: ICD–9 (International Classification of Diseases, Ninth Revision). Amounts may not sum to totals due to rounding.

Source: MedPAC analysis of 100 percent Medicare Part B therapy claims, 2011.

Improve longer term management of the benefit

The Medicare program does not have adequate data with which to evaluate the medical necessity and outcomes of outpatient therapy. Medicare's primary source of information on therapy services is claims data, but the diagnosis information currently required for Medicare payment does not permit any meaningful assessment of how a given therapy regimen relates to a given diagnosis. Claims data also lack measures of functional status, which could help determine the impact of therapy services on the patient's physical function. The Commission's third recommendation aims to improve the longer term management of the benefit, with a specific focus on improving the quality of claims data and developing a tool to collect data on functional status.

Improve accuracy of diagnosis codes

Medicare does not have adequate clinical data to determine the medical necessity or the outcomes of care once therapy is initiated. V codes are largely descriptive of services provided but do not describe the patient's clinical condition or disease. In 2011, two V codes taken together (V57.1 and V57.89) accounted for over $680 million, or about 12 percent of outpatient therapy payments (Table 9-9). The use of V codes is extensive; about 10 percent of physical therapy and occupational therapy claims list a V code as the principal diagnosis.

Tightening diagnosis coding practices would improve the specificity of the diagnosis used in claims. CMS should automatically deny claims that have V codes for a principal diagnosis for therapy. Discontinued use of V codes would require therapists and other professionals to use more clinically relevant medical diagnosis codes. For example, if the primary reason for therapy is to recover from a knee injury, providers could use codes to indicate that there was a tear or injury to the knee that necessitated physical therapy. The private sector provides precedents for the denial of V codes in therapy claims. We found that at least one large private benefit manager with contracts to manage therapy benefits for several million patients does not accept V codes for a principal diagnosis on therapy claims.

It is unclear to what extent ICD–10 codes, which expand on the ICD–9 diagnosis codes, will yield better clinical information. Under ICD–10 coding, "abnormality of gait" extends to four conditions: (1) ataxic gait, (2) paralytic gait, (3) other abnormalities of gait and mobility, and (4) unspecific abnormalities of gait and mobility. These codes allow the provider to describe the functional impairment more specifically, though they do not add any information pertaining to the underlying diagnosis.

Develop and collect measures of functional status for outpatient therapy users

Measures of functional status reflect the extent to which patients experience limitations in their ability to perform

EMBARGOED FOR RELEASE UNTIL 4:00PM JUNE 14, 2013

TABLE 9–10

Information for a streamlined, standardized tool to measure functional status for outpatient therapy services

Domains	Sample measures
Demographic information	• Age • Sex
Diagnosis	• Reason for therapy services (e.g., change in physical function, change in cognitive function) • Therapy-specific diagnosis (e.g., aphasia, osteoarthritis) • Duration of the patient's condition
Severity	• Prior surgery or hospitalization for the condition • Use of assistive device (e.g., rails) • Current medication use for condition (e.g., number of medications for therapy condition)
Affected body structures and functions	• Body functions (e.g., muscle functions related to power or strength, movement functions such as gait, hearing, pain) • Body structures (e.g., head, cervical spine, left or right hip, shoulder, mouth)
Limitations with activities of daily living and participation	• Communication (e.g., spoken communication, sensory experiences like watching) • Self-care (e.g., preparing meals, dressing) • Carrying objects or maintaining body positions • Ability to continue work or community life

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

daily tasks and need assistance. Measures of functional improvement help clinicians assess the effectiveness of their treatments and determine the most efficient therapy interventions (Higginson and Carr 2001). Measurement can also show progress during the course of therapy and allow practitioners to direct resources in a more targeted manner. Collected over the duration of therapy services from admission to discharge, this information would allow CMS to assess functional improvement over time. Unlike inpatient therapy settings (i.e., SNFs and inpatient rehabilitation facilities) or home health care, Medicare does not collect information on the clinical and demographic characteristics of therapy users. Such information, along with improved information on therapy patients' diagnoses (discussed above), is essential to redesigning Medicare's payment system for outpatient therapy. The current payment system has strong incentives to provide more therapy services and few controls in place to check inappropriate use. In addition, Medicare pays for these services without information pertaining to their outcomes. Over the long term, Medicare could consider improving the way it pays for therapy by bundling therapy with episodes of care and tying payments to a patient's functional improvement. The program currently does not have the information necessary to move the payment system in this direction.

In July 2012, the Commission convened a panel of practitioners of outpatient therapy and clinical researchers to obtain their input on some of the questions raised by our mandate to produce this report. The panelists indicated that many of the data elements that they have found to be useful predictors of patients' resource needs are being evaluated under CMS's Developing Outpatient Therapy Payment Alternatives (DOTPA) study. The DOTPA study evaluated two Continuity Assessment Record and Evaluation (CARE) tools for outpatient therapy. One tool, CARE–C, targets community providers such as private practice therapists, while the CARE–F tool targets measurement in facilities. CMS expects the study, scheduled to be completed at the end of 2013, will validate some items for a potential assessment tool for outpatient therapy services. Specifically, panelists thought that the "reason for therapy" section of the two patient assessment tools under study in the DOTPA project contains much of the information Medicare would need to begin to transform the way the program pays for outpatient therapy (Table 9-10).

Existing tools for collecting functional status measures

CMS has recognized three instruments for providers to document physical and occupational therapy: Outpatient Physical Therapy Improvement in Movement Assessment Log (OPTIMAL), Patient Inquiry© tool by Focus On Therapeutic Outcomes, Inc. (FOTO), and Activity Measure for Post-Acute Care (AM–PAC). CMS has also recognized the National Outcomes Measurement System (NOMS) to measure the functional status of speech–language pathology patients. CMS has not explicitly endorsed or required any of them for the purposes of collecting functional status measures.

The three tools recommended for physical and occupational therapy assessment vary in how extensively they are used and in their assessment methods. OPTIMAL (for physical therapy) assesses patients with musculoskeletal conditions in outpatient settings. It assesses a patient's ability and confidence in performing 21 mobility actions such as standing, walking, bending, and climbing stairs (Guccione et al. 2005). FOTO, a robust computer-adaptive tool, also assesses a patient's functional status and improvement, as well as the number of visits needed for a specific functional improvement. The predictive model for therapy needs under FOTO considers patients' age, sex, diagnosis, impairment, acuity, severity, and surgical history to estimate the number of visits and expected functional improvement given a specified duration. We found that some private benefit managers (vendors that contract with health plans to manage their outpatient therapy benefits) use FOTO because of its ease of use. The AM–PAC tool also uses computer-adaptive technology to assess a patient's ability to perform three types of physical, personal, and instrumental activities as well as applied cognitive activities (Haley et al. 2006). AM–PAC, FOTO, and OPTIMAL tools assess function more accurately for physical and occupational therapy patients than for speech–language pathology patients (Ciolek and Hwang 2010).

The NOMS tool for speech–language pathology measures function in patients with substantial speech, cognitive, or communication impairments. The tool assesses up to 15 functional communication measures, such as memory, spoken language comprehension and expression, and swallowing difficulty. Assessments based on the NOMS tool help determine severity, complexity, and treatment goals based on demographic information, diagnoses, and level of functional communication and swallowing. ■

EMBARGOED FOR RELEASE UNTIL 4:00PM JUNE 14, 2013

CMS could use a variant of this section to collect data on functional status and other information believed to help predict therapy needs, such as medication use and prior surgeries. With this information, CMS could begin to redesign the payment system so that it rewards practitioners' abilities to achieve positive outcomes for their patients rather than providing more services. Further, this could also help establish the necessity of a given amount of therapy. Because the information needed is relatively succinct, it would impose a minimal reporting burden on providers of outpatient therapy. CMS could use an assessment based on the DOTPA "reason for therapy" section across all types of outpatient therapy (physical therapy, occupational therapy, and speech–language pathology services). Such an instrument would not replace the more detailed clinical assessment tools that therapists currently use to track patients' conditions (see text box, this page). We believe this streamlined instrument for assessing functional gains and patients' need for therapy would be superior to the approach recently adopted by CMS to collect information about patients' functional status (see text box, facing page).

Without better information about clinical diagnoses and functional status, it is difficult to determine from claims data how much therapy is required for the conditions specified, which is the first step toward developing standards for appropriate use and measuring outcomes.

RECOMMENDATION 9-3

The Congress should direct the Secretary to:

- **prohibit the use of V codes as the principal diagnosis on outpatient therapy claims, and**
- **collect functional status information on therapy users using a streamlined, standardized, assessment tool that reflects factors such as patients' demographic information, diagnoses, medications, surgery, and**

CMS's method for collecting data on functional status

The Middle Class Tax Relief and Job Creation Act of 2012 required CMS to develop a method of collecting functional status information from claims data by January 1, 2013. CMS adopted an approach in which providers report functional status using 11 categories of specific functional limitations (e.g., walking and moving around, spoken language comprehension) and three general categories (one category for each therapy type) for limitations that do not fit within the 11 specified categories. Providers report this information using G codes. Providers are expected to report functional limitations at the outset of the therapy episode, at some point during treatment, and at the conclusion of the therapy episode. CMS also adopted a seven-point scale of modifiers that would accompany each G code to indicate the level of severity and impairment (e.g., 50 percent impairment in the ability to walk and move around). Tracking functional limitations throughout an episode could provide information about outcomes that, when combined with clinical diagnoses, could inform further payment design decisions.

Although this approach will improve the data available to CMS, this method lacks a standardized approach to measuring functional impairment. A 30 percent impairment assessed by one physical therapist could be judged as a 40 percent impairment by another therapist. Excessive variation in how patients are assessed could threaten the reliability of the data and would make it difficult to compare outcomes across patients and providers. ■

functional limitations to classify patients across all therapy types. The Secretary should use the information collected using this tool to measure the impact of therapy services on functional status, and provide the basis for development of an episode-based or global payment system.

RATIONALE 9-3

The Medicare program has inadequate data with which to evaluate the medical necessity of therapy services. Improving diagnosis codes and collecting information about functional status during the course of therapy would improve Medicare's ability to classify patients by severity of condition and ultimately pay therapy providers for performance. Improved functional data would facilitate Medicare's ability to include outpatient therapy services in new payment and delivery models such as accountable care organizations in the future.

IMPLICATIONS 9-3

Spending

- At the time this recommendation was approved, we expected that it would have no impact on program spending.

Access

- We do not expect that this recommendation will adversely affect beneficiaries' access to needed care.

Quality

- Over the long term, we expect this recommendation will allow clinicians and the program to better assess the effect of outpatient therapy on functional outcomes and tie reimbursement to functional improvement.

Delivery system reform

- The recommendation is consistent with the Commission's goals of reforming the health care delivery system by allowing Medicare to construct larger payment units for outpatient therapy services and eventually tying payments for these services to patients' functional improvement. ■

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Endnotes

1 In January 2013, a Medicare legal settlement (Jimmo v. Sebelius, D. Vt, No. 5:11–cv–00017–cr) required CMS to clarify that the potential for improvement in a patient's condition is not a requirement for Medicare coverage. At the time of the writing of this report, Medicare's provider manuals and other subregulatory guidance did not reflect this change.

2 V codes often are used as primary diagnosis codes in the outpatient therapy setting. These codes do not describe the patient's medical condition (e.g., knee injury) but rather describe the type of therapy received, such as V57.1 for nonspecific care involving other physical therapy or V57.21 for nonspecific care involving other occupational therapy.

3 Nonresidents may include walk-ins from the community and residents in assisted living facilities.

4 For one high-volume therapy service, Current Procedural Terminology (CPT) 97110 (therapeutic procedure: 1 or more areas, 15 minutes each, therapeutic exercises to develop strength, range of motion, and flexibility), the practice expense RVUs account for 51 percent of the total payment, the work RVUs account for 48 percent of the total, and the professional liability insurance RVUs account for 1 percent of the total. Similarly, for CPT 97112 (therapeutic procedure: 1 or more areas, 15 minutes each, neuromuscular reeducation), the practice expense RVUs account for 53 percent of the total payment, the work RVUs account for 46 percent of the total, and the professional liability insurance RVUs account for 1 percent of the total. When multiple services are furnished by the same provider to the same patient on the same day, a multiple procedure payment reduction applies to the practice expense component of the lower paid codes.

5 NCDs apply to all MACs, but LCDs can vary from MAC to MAC.

6 First Coast Service Options allows additional treatments if they meet medical necessity requirements.

7 These limits reflect total payments and include deductibles and coinsurance paid by beneficiaries.

8 MACs have some discretion in how often they review therapy claims and medical records for medical necessity to support the use of the modifier. We learned through our discussions with MAC staff that additional reviews are rarely conducted for therapy services.

9 Physical therapists in private practice may report quality measures as part of the Physician Quality Reporting System (PQRS) and in the future will be subject to penalties when these quality measures are not reported on claims. However, the PQRS measures are process measures and do not measure outcomes such as functional improvement. In addition, these measures are not reported by other providers such as skilled nursing facilities.

10 Program payments are 80 percent of allowed charges. The other 20 percent of the allowed charge is the beneficiary deductible and coinsurance payment.

11 In 2010, OIG also recommended revising the therapy cap exceptions process (Office of Inspector General 2010).

EMBARGOED FOR RELEASE UNTIL 4:00PM JUNE 14, 2013

References

Bhogal, S. K., R. Teasell, and M. Speechley. 2003. Intensity of aphasia therapy, impact on recovery. *Stroke* 34, no. 4 (April): 987–993.

Boards of Trustees, Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds. 2012. *2012 annual report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Insurance Trust Funds.* Washington, DC: Boards of Trustees.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2012a. Local coverage determination (LCD) for outpatient rehabilitation therapy services billed to Medicare Part B (L28531). Wisconsin Physicians Service Insurance Corporation. http://www.cms.gov/medicare-coverage-database/details/lcd-details.aspx?LCDId=28531&ContrId=48&ver=24&ContrVer=1&CoverageSelection=Local&ArticleType=All&PolicyType=Final&s=Illinois&KeyWord=therapy&KeyWordLookUp=Title&KeyWordSearchType=And&bc=gAAAABAAAAAA&.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2012b. Local coverage determination (LCD) for therapy and rehabilitation services (L29289): First Coast Service Options, Inc. For services performed on or after 03/01/2012. http://www.cms.gov/medicare-coverage-database/details/lcd-details.aspx?LCDId=29289&ContrId=197&ver=19&ContrVer=1&bc=AgIAAAAAAAAA&.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2012c. Local coverage determination (LCD) for therapy services (PT, OT, SLP) – 4Y-26AB – R10 (L26832): TrailBlazer Health Enterprises, LLC. For services performed on or after 10/01/2011. http://www.cms.gov/medicare-coverage-database/details/lcd-details.aspx?LCDId=26832&ContrId=153&ver=96&ContrVer=1&bc=AgIAAAAAAAAA&.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2012d. National coverage determination (NCD) for infrared therapy devices (270.6). Publication number 100–3. Manual section number 270.6. Transmittal number 62. http://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=315&ncdver=1&NCAId=176&NcaName=Infrared+Therapy+Devices&IsPopup=y&bc=AAAAAAAAIAAA&.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2011. Medicare program; payment policies under the physician fee schedule, five-year review of work relative value units, clinical laboratory fee schedule: Signature on requisition, and other revisions to Part B for CY 2012. Final rule. *Federal Register* 76, no. 228 (November 28): 73026–73474.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2010a. Medicare program; payment policies under the physician fee schedule and other revisions to Part B for CY 2011. Final rule. *Federal Register* 75, no. 228 (November 29): 73169–73860.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2010b. Medicare program; payment policies under the physician fee schedule and other revisions to Part B for CY 2011. Proposed rule. *Federal Register* 75, no. 133 (July 13): 40039–40718.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2009. *Medicare benefit policy manual.* Chapter 15: Covered medical and other health services. Accessed August 13. Baltimore, MD: CMS. http://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/bp102c15.pdf.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2006. Medicare program; revisions to payment policies under the physician fee schedule for calendar year 2007 and other changes to payment under Part B. Proposed rule. *Federal Register* 71, no. 162 (August 22): 48982–49252.

Ciolek, D., and W. Hwang. 2010. *CY 2008 outpatient therapy utilization report.* Report prepared for the Centers for Medicare & Medicaid Services. Baltimore, MD: Computer Sciences Corporation.

de Angelis, E. C., L. F. Mourao, H. B. Ferraz, et al. 1997. Effect of voice rehabilitation on oral communication of Parkinson's disease patients. *Acta Neurologica Scandinavica* 96, no. 4 (October): 199–205.

Donnelly, C., and A. Carswell. 2002. Individualized outcome measures: A review of the literature. *Canadian Journal of Occupational Therapy* 69, no. 2 (April): 84–94.

Elixhauser, A., and E. M. McCarthy. 1996. *Clinical classifications for health policy research, version 2: Hospital inpatient statistics.* Healthcare Cost and Utilization Project (HCUP 3) research note 1. AHCPR publication no. 96 0017. Rockville, MD: Agency for Health Care Policy and Research.

Guccione, A. A., T. J. Mielenz, R. F. Devellis, et al. 2005. Development and testing of a self-report instrument to measure actions: Outpatient physical therapy improvement in movement assessment log (OPTIMAL). *Physical Therapy* 85, no. 6 (June): 515–530.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Haley, S. M., P. Ni, R. K. Hambleton, et al. 2006. Computer adaptive testing improved accuracy and precision of scores over random item selection in a physical functioning item bank. *Journal of Clinical Epidemiology* 59, no. 11 (November): 1174–1182.

Hayden, J. A., M. W. van Tulder, and G. Tomlinson. 2005. Systematic review: Strategies for using exercise therapy to improve outcomes in chronic low back pain. *Annals of Internal Medicine* 142, no. 9 (May 3): 776–785.

Higginson, I. J., and A. J. Carr. 2001. Measuring the quality of life: Using quality of life measures in the clinical setting. *BMJ* 322: 1297–1300.

Legg, L., A. Drummond, J. Leonardi-Bee, et al. 2007. Occupational therapy for patients with problems in personal activities of daily living after stroke: Systematic review of randomised trials. *BMJ* 335, no. 7626 (November 3): 922.

Maxwell, S., C. Basseggio, and M. Storeygard. 2001. *Part B therapy services under Medicare, 1998–2000: Impact of extending fee schedule payments and coverage limits.* Washington, DC: Urban Institute.

Medicare Payment Advisory Commission. 2012. *A data book: Health care spending and the Medicare program.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2011a. *Report to the Congress: Medicare and the health care delivery system.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2011b. *Report to the Congress: Medicare payment policy.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2006. *Report to the Congress: Increasing the value of Medicare.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2005. *Report to the Congress: Medicare payment policy.* Washington, DC: MedPAC.

Michael, Y. L., E. P. Whitlock, J. S. Lin, et al. 2010. Primary care-relevant interventions to prevent falling in older adults: A systematic evidence review for the U.S. Preventive Services Task Force. *Annals of Internal Medicine* 153, no. 12: 815–825.

Office of Inspector General, Department of Health and Human Services. 2010. *Questionable billing for Medicare outpatient therapy services.* Report # OEI–04–09–00540. Washington, DC: OIG.

Robbins, J., S. G. Butler, S. K. Daniels, et al. 2008. Swallowing and dysphagia rehabilitation: Translating principles of neural plasticity into clinically oriented evidence. *Journal of Speech Language and Hearing Research* 51, no. 1 (February): S276–300.

Schoofs, M., and M. Tamman. 2010. Confidentiality cloaks Medicare abuse. *Wall Street Journal,* December 22.

Steultjens, E. M., J. Dekker, L. M. Bouter, et al. 2004. Occupational therapy for community dwelling elderly people: A systematic review. *Age and Ageing* 33, no. 5 (September): 453–460.

Steultjens, E. M., J. Dekker, L. M. Bouter, et al. 2002. Occupational therapy for rheumatoid arthritis: A systematic review. *Arthritis & Rheumatism* 47, no. 6 (December 15): 672–685.

Van Peppen, R. P., G. Kwakkel, S. Wood-Dauphinee, et al. 2004. The impact of physical therapy on functional outcomes after stroke: What's the evidence? *Clinical Rehabilitation* 18, no. 8 (December): 833–862.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

APPENDIX A

Review of CMS's preliminary estimate of the 2014 update for physician and other professional services

EMBARGOED FOR RELEASE UNTIL 6:00PM JUNE 14, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

APPENDIX A

Review of CMS's preliminary estimate of the 2014 update for physician and other professional services

EMBARGOED FOR RELEASE UNTIL 6:00PM JUNE 11, 2013

In CMS's annual letter to the Commission on the update for physician and other professional services, the agency's preliminary estimate of the 2014 update is –24.4 percent (Blum 2013). The prescribed reduction is due to a series of temporary increases enacted over several years that—under current law—expire at the end of 2013. Those increases have prevented a series of negative updates under the sustainable growth rate (SGR) formula—the statutory formula for annually updating Medicare's payment rates for physician and other health professional services. If the temporary increases expire, the physician fee schedule's conversion factor must decrease by 26.5 percent. The difference between this reduction and the 2013 update would be the SGR formula's update—specific to 2013—of 2.8 percent. This increase would be applied to the conversion factor after it had been reduced by 26.5 percent.[1]

This appendix provides the Commission's mandated review of CMS's estimate. Absent a change in law, the expiration of the temporary increases and the formula's update for 2013 are very unlikely to produce an update that differs substantially from –24.4 percent. The temporary increases—by far, the largest factor influencing the payment reduction—were specified in law. The estimate of an SGR formula update of 2.8 percent for 2014 could change between now and when CMS would implement the update in January, but any such changes are likely to be small compared with the total reduction prescribed by law.

While this appendix is limited to review of the preliminary update estimate, the Commission has concerns about the SGR formula as a payment policy. The SGR formula may have resulted in lower updates, but it has failed to restrain volume growth; in fact, for some specialties the formula may have exacerbated growth. In addition, the temporary increases, or "fixes," to override the SGR formula are undermining the credibility of Medicare by engendering uncertainty and frustration among providers, which may be causing anxiety among beneficiaries. In an October 2011 letter to the Congress, the Commission recommended repealing the SGR formula and replacing it with legislatively specified updates that would no longer be based on an expenditure-control formula (Medicare Payment Advisory Commission 2011). We reaffirmed our position in a letter sent to the Congress on April 10, 2013, emphasizing that the time to repeal the SGR is now (Medicare Payment Advisory Commission 2013). ■

Endnotes

1 In CMS's update calculations, percentages are not added. Instead, they are converted to ratios and multiplied. For instance, the decrease in payment rates of 24.4 percent is the arithmetic product of the 2014 update (2.8 percent, or 1.028) and the expiration of the temporary increases (–26.5 percent, or 0.735). The multiplication is $1.028 \times 0.735 = 0.756$, or –24.4 percent.

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

References

Blum, J. D. 2013. Letter from Jonathan Blum, Centers for Medicare & Medicaid Services, Department of Health and Human Services, to Glenn Hackbarth, Medicare Payment Advisory Commission, March 5.

Medicare Payment Advisory Commission. 2013. Moving forward from the sustainable growth rate system. Letter to the Congress. April 10.

Medicare Payment Advisory Commission. 2011. Moving forward from the sustainable growth rate (SGR) system. Letter to the Congress. October 14.

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

APPENDIX B

Commissioners' voting on recommendations

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

APPENDIX B

Commissioners' voting on recommendations

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

In the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000, the Congress required MedPAC to call for individual Commissioner votes on each recommendation and to document the voting record in its report. The information below satisfies that mandate.

Chapter 1: Competitively determined plan contributions

No recommendations

Chapter 2: Medicare payment differences across ambulatory settings

No recommendations

Chapter 3: Approaches to bundling payment for post-acute care

No recommendations

Chapter 4: Refining the hospital readmissions reduction program

No recommendations

Chapter 5: Medicare hospice policy issues

No recommendations

Chapter 6: Care needs for dual-eligible beneficiaries

No recommendations

Chapter 7: Mandated report: Medicare payment for ambulance services

7-1 The Congress should:

- allow the three temporary ambulance add-on policies to expire;
- direct the Secretary to rebalance the relative values for ambulance services by lowering the relative value of basic life support nonemergency services and increasing the relative values of other ground transports. Rebalancing should be budget neutral relative to current law and maintain payments for other ground transports at their level prior to expiration of the temporary ground ambulance add-on; and
- direct the Secretary to replace the permanent rural short-mileage add-on for ground ambulance transports with a new budget-neutral adjustment directing increased payments to ground transports originating in geographically isolated, low-volume areas to protect access in those areas.

Yes: *Armstrong, Baicker, Butler, Coombs, Chernew, Dean, Gradison, Hackbarth, Hall, Hoadley, Kuhn, Miller, Naylor, Nerenz, Redberg, Samitt, Uccello*

7-2 The Congress should direct the Secretary to:

- promulgate national guidelines to more precisely define medical necessity requirements for both emergency and nonemergency (recurring and nonrecurring) ground ambulance transport services;
- develop a set of national edits based on those guidelines to be used by all claims processors; and
- identify geographic areas and/or ambulance suppliers and providers that display aberrant patterns of use, and use statutory authority to address clinically inappropriate use of basic life support nonemergency ground ambulance transports.

Yes: *Armstrong, Baicker, Butler, Coombs, Chernew, Dean, Gradison, Hackbarth, Hall, Hoadley, Kuhn, Miller, Naylor, Nerenz, Redberg, Samitt, Uccello*

Chapter 8: Mandated report: Geographic adjustment of payments for the work of physicians and other health professionals

8 Medicare payments for work under the fee schedule for physicians and other health professionals should be geographically adjusted. The adjustment should reflect geographic differences across labor markets for physicians and other health professionals. The Congress should allow the geographic practice cost index (GPCI) floor to expire per current law and, because of uncertainty in the data, should adjust payments for the work of physicians and other health professionals only by the current one-quarter GPCI and direct the Secretary to develop an adjuster to replace it.

Yes: *Armstrong, Baicker, Butler, Chernew, Dean, Gradison, Hackbarth, Hall, Hoadley, Kuhn, Naylor, Nerenz, Redberg, Samitt, Uccello*
No: *Coombs, Miller*

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

Chapter 9: Mandated report: Improving Medicare's payment system for outpatient therapy services

9-1 The Congress should direct the Secretary to:

- reduce the certification period for the outpatient therapy plan of care from 90 days to 45 days, and
- develop national guidelines for therapy services, implement payment edits at the national level based on these guidelines that target implausible amounts of therapy, and use authorities granted by the Patient Protection and Affordable Care Act of 2010 to target high-use geographic areas and aberrant providers.

Yes: *Armstrong, Baicker, Butler, Coombs, Chernew, Dean, Gradison, Hackbarth, Hall, Hoadley, Kuhn, Miller, Naylor, Nerenz, Redberg, Samitt, Uccello*

9-2 To avoid caps without exceptions, the Congress should:

- reduce the therapy cap for physical therapy and speech–language pathology services combined and the separate cap for occupational therapy to $1,270 in 2013. These caps should be updated each year by the Medicare Economic Index.
- direct the Secretary to implement a manual review process for requests to exceed cap amounts, and provide the resources to CMS for this purpose.
- permanently include services delivered in hospital outpatient departments under therapy caps.
- apply a multiple procedure payment reduction of 50 percent to the practice expense portion of outpatient therapy services provided to the same patient on the same day.

Yes: *Armstrong, Baicker, Butler, Coombs, Chernew, Dean, Gradison, Hackbarth, Hall, Hoadley, Kuhn, Miller, Naylor, Nerenz, Redberg, Samitt, Uccello*

9-3 The Congress should direct the Secretary to:

- prohibit the use of V codes as the principal diagnosis on outpatient therapy claims, and
- collect functional status information on therapy users using a streamlined, standardized, assessment tool that reflects factors such as patients' demographic information, diagnoses, medications, surgery, and functional limitations to classify patients across all therapy types. The Secretary should use the information collected using this tool to measure the impact of therapy services on functional status, and provide the basis for development of an episode-based or global payment system.

Yes: *Armstrong, Baicker, Butler, Coombs, Chernew, Dean, Gradison, Hackbarth, Hall, Hoadley, Kuhn, Miller, Naylor, Nerenz, Redberg, Samitt, Uccello*

Appendix A: Review of CMS's preliminary estimate of the 2014 update for physician and other professional services

No recommendations

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

Acronyms

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

Acronyms

AAC	Area Advisory Committee
AARP	(formerly) American Association of Retired Persons
ABN	advance beneficiary notice
ACC	American College of Cardiology
ACCRA	American Chamber of Commerce Research Association
ACE	acute care episode
ACO	accountable care organization
ACS	American Community Survey
AHRQ	Agency for Healthcare Research and Quality
ALS	advanced life support
AM–PAC	Activity Measure for Post-Acute Care
AMA	American Medical Association
AMI	acute myocardial infarction
APC	ambulatory payment classification
ASC	ambulatory surgical center
ATRA	American Taxpayer Relief Act of 2012
BBA	Balanced Budget Act of 1997
BLS	basic life support
BLS	Bureau of Labor Statistics
C2ER	Council for Community and Economic Research
CABG	coronary artery bypass graft
CAH	critical access hospital
CAHPS®	Consumer Assessment of Healthcare Providers and Systems®
CARE	Continuity Assessment Record and Evaluation [tool]
CARE–C	Continuity Assessment Record and Evaluation–community providers
CARE–F	Continuity Assessment Record and Evaluation–facilities
CBSA	core-based statistical area
CEO	chief executive officer
CF	conversion factor
CFR	Code of Federal Regulations
CHC	community health center
CHC	continuous home care
CI	confidence interval
CME	Common Medicare Environment
CMS	Centers for Medicare & Medicaid Services
CMS–HCC	CMS–hierarchical condition categories
COL	cost of living
COPD	chronic obstructive pulmonary disease
COPSS	Committee of Presidents of Statistical Societies
CORF	comprehensive outpatient rehabilitation facility
CPAC	Competitive Pricing Advisory Committee
CPC	competitively determined plan contribution
CPT	Current Procedural Terminology
CRG	clinical risk group
DME	durable medical equipment
DOD	date of death
DOTPA	Developing Outpatient Therapy Payment Alternatives [study]
DRG	diagnosis related group
DSH	disproportionate share
DSH	disproportionate share hospital
D–SNP	dual-eligible special needs plan
E&M	evaluation and management
ED	emergency department
EEG	electroencephalography
EMTALA	Emergency Medical Treatment and Active Labor Act of 1986
ESRD	end-stage renal disease
FEHB	Federal Employees Health Benefits [Program]
FFS	fee-for-service
FOTO	Focus On Therapeutic Outcomes, Inc.
FPL	federal poverty level
FQHC	federally qualified health center
GAF	geographic adjustment factor
GAO	Government Accountability Office
GPCI	geographic practice cost index
HCBS	home- and community-based services
HCC	hierarchical condition categories
HCFA	Health Care Financing Administration
HCPCS	Healthcare Common Procedure Coding System
HHA	home health agency
HHI	Herfindahl index of competition in the core-based statistical area
HMO	health maintenance organization
HOPD	hospital outpatient department
HPSA	health professional shortage area
HRRP	hospital readmissions reduction program
HSC	Center for Studying Health System Change
ICD–9	International Classification of Diseases, Ninth Revision
IME	indirect medical education

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

IMRT	intensity-modulated radiation therapy
IOL	intraocular lens
IOM	Institute of Medicine
IPPS	inpatient prospective payment system
IRF	inpatient rehabilitation facility
LCD	local coverage determination
LIS	low-income [drug] subsidy
LOS	length of stay
LTCH	long-term care hospital
LTSS	long-term care services and supports
MA	Medicare Advantage
MAC	Medicare administrative contractor
MCC	major complication or comorbidity
MCTRJCA	Middle Class Tax Relief and Job Creation Act of 2012
MedPAC	Medicare Payment Advisory Commission
MedPAR	Medicare Provider Analysis and Review [file]
MGMA	Medical Group Management Association
MHA	Missouri Hospital Association
MMA	Medicare Prescription Drug, Improvement, and Modernization Act of 2003
MMS	Massachusetts Medical Society
MPPR	multiple procedure payment reduction
MSA	metropolitan statistical area
MS–DRG	Medicare severity–diagnosis related group
MSP	Medicare Savings Program
MSPB	Medicare spending per beneficiary
N/A	not available
NCD	national coverage determination
NECMA	New England county metropolitan area
NOMS	National Outcomes Measurement System
NORC	(formerly) National Opinion Research Center
NPP	nonphysician practitioner
NQF	National Quality Forum
NS	not significant
NYC	New York City
OIG	Office of Inspector General
OOP	out-of-pocket
OPD	hospital outpatient department
OPM	Office of Personnel Management
OPPS	outpatient prospective payment system
OPTIMAL	Outpatient Physical Therapy Improvement in Movement Assessment Log
ORF	outpatient rehabilitation facility
OT	occupational therapy
PAC	post-acute care
PACE	Program of All-Inclusive Care for the Elderly
PE	practice expense
PFS	physician fee schedule
PLI	professional liability insurance
PPACA	Patient Protection and Affordable Care Act of 2010
PPO	preferred provider organization
PPR	potentially preventable readmission
PPRC	Physician Payment Review Commission
PQRS	Physician Quality Reporting System
PT	physical therapist
PT	physical therapy
PTCA	percutaneous transluminal coronary angioplasty
QIO	Quality Improvement Organization [Medicare]
QMB	qualified Medicare beneficiary
RHC	routine home care
RVU	relative value unit
SCO	Senior Care Options
SES	socioeconomic status
SGR	sustainable growth rate
SLMB	specified low-income Medicare beneficiary
SLP	speech–language pathology
SNBC	Special Needs Basic Care
SNF	skilled nursing facility
SPMI	severe and persistent mental illness
SSDI	Social Security Disability Insurance
SSI	Supplemental Security Income
TB	tuberculosis
UCSF	University of California at San Francisco
USPS	United States Postal Service
USRDS	United States Renal Data System
VHA	Veterans Health Administration
ZCTA	ZIP code tabulation area

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

More about MedPAC

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

Commission members

Glenn M. Hackbarth, J.D., chairman
Bend, OR

Michael Chernew, Ph.D., vice chairman
Harvard Medical School
Boston, MA

Term expires April 2013

Scott Armstrong, M.B.A., F.A.C.H.E.
Group Health Cooperative
Seattle, WA

Katherine Baicker, Ph.D.
Harvard School of Public Health
Boston, MA

Thomas M. Dean, M.D.
Horizon Health Care, Inc.
Wessington Springs, SD

Herb Kuhn
Missouri Hospital Association
Jefferson City, MO

Mary Naylor, Ph.D., R.N., F.A.A.N.
University of Pennsylvania, School of Nursing
Philadelphia, PA

Cori Uccello, F.S.A., M.A.A.A., M.P.P.
American Academy of Actuaries
Washington, DC

Term expires April 2014

Peter W. Butler, M.H.S.A.
Rush University
Chicago, IL

Michael Chernew, Ph.D.

Bill Gradison, M.B.A.
Fuqua School of Business, Duke University
McLean, VA

William J. Hall, M.D., M.A.C.P.
University of Rochester School of Medicine
Rochester, NY

George N. Miller, Jr., M.H.S.A.
Okmulgee Memorial Hospital
Okmulgee, OK

Term expires April 2015

Alice Coombs, M.D.
Milton Hospital and South Shore Hospital
Weymouth, MA

Glenn M. Hackbarth, J.D.

Jack Hoadley, Ph.D.
Health Policy Institute, Georgetown University
Washington, DC

David Nerenz, Ph.D.
Henry Ford Health System
Detroit, MI

Rita Redberg, M.D.
University of California at San Francisco Medical Center
San Francisco, CA

Craig Samitt, M.D., M.B.A.
Dean Health System, Inc.
Madison, WI

EMBARGOED FOR RELEASE UNTIL 1:00PM JUNE 14, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

Commissioners' biographies

Scott Armstrong, M.B.A., F.A.C.H.E., is president and chief executive officer (CEO) of Group Health Cooperative, a consumer-governed health system serving 650,000 enrollees through coordinated care plans for groups and individuals and for Medicare, Medicaid, and State Children's Health Insurance Program beneficiaries. He has worked at Group Health since 1986, serving in positions ranging from assistant hospital administrator to chief operating officer; he became president and CEO in 2005. Before joining Group Health, Mr. Armstrong was assistant vice president for hospital operations at Miami Valley Hospital in Dayton, OH. Mr. Armstrong is chair of the board of the Alliance of Community Health Plans and board member of America's Health Insurance Plans and the Seattle Chamber of Commerce. He is also immediate past chair of the Board of the Pacific Science Center and a fellow of the American College of Healthcare Executives. He received his bachelor's degree from Hamilton College in New York and a master's degree in business with a concentration in hospital administration from the University of Wisconsin–Madison.

Katherine Baicker, Ph.D., is professor of health economics in the Department of Health Policy and Management at the Harvard School of Public Health, where her research focuses on health insurance finance and the effect of reforms on the distribution and quality of care. She serves on the editorial boards of *Health Affairs*, the *Journal of Health Economics*, the *Journal of Economic Perspectives*, and the Forum for Health Economics and Policy, and she is chair of the Board of Directors of Academy Health. She is a research associate at the National Bureau of Economic Research, is on the Congressional Budget Office's Panel of Health Advisers, and is an elected member of the Institute of Medicine. From 2005 to 2007, Professor Baicker served as a Senate-confirmed member of the President's Council of Economic Advisers. She received her B.A. in economics from Yale University and her Ph.D. in economics from Harvard University.

Peter W. Butler, M.H.S.A., is a nationally recognized health care executive with more than 30 years of experience in academic medical centers and health care systems. In addition to being president and chief operating officer of Rush University Medical Center in Chicago, IL, Mr. Butler is an associate professor and chairman of the Department of Health Systems Management at Rush University. Before joining Rush, he served as president and chief executive officer at the Methodist Hospital System in Houston and senior vice president and chief administrative officer at the Henry Ford Health System in Detroit. He has served as chairman of the board of the University HealthSystem Consortium. He also currently serves as chairman of the board of the National Center for Healthcare Leadership. Mr. Butler holds an undergraduate degree in psychology from Amherst College and a master's degree in health services administration from the University of Michigan.

Michael Chernew, Ph.D., is a professor in the Department of Health Care Policy at Harvard Medical School. Dr. Chernew's research activities focus on several areas, most notably the causes and consequences of growth in health care expenditures, geographic variation in medical spending and use, and value-based insurance design. He is a member of the Congressional Budget Office's Panel of Health Advisers and the Commonwealth Foundation's Commission on a High Performance Health System. In 2000, 2004, and 2011, he served on technical advisory panels for the Centers for Medicare & Medicaid Services that reviewed the assumptions used by the Medicare actuaries to assess the financial status of the Medicare trust funds. Dr. Chernew is a Faculty Research Fellow of the National Bureau of Economic Research. He co-edits the *American Journal of Managed Care* and is a senior associate editor of *Health Services Research*. In 2010, Dr. Chernew was elected to the Institute of Medicine (IOM) of the National Academy of Sciences and serves on the IOM Committee on Determination of Essential Health Benefits. Dr. Chernew earned his undergraduate degree from the University of Pennsylvania and a doctorate in economics from Stanford University.

Alice Coombs, M.D., is a critical care specialist and an anesthesiologist at Milton Hospital and South Shore Hospital in Weymouth, MA. She is board certified in internal medicine, anesthesiology, and critical care medicine. Dr. Coombs is past president of the Massachusetts Medical Society (MMS) and a member of MMS's Committee on Ethnic Diversity. She chaired the Committee on Workforce Diversity that is part of the American Medical Association's (AMA's) Commission to Eliminate Health Care Disparities and on the Governing Council for the AMA Minority Affairs Consortium and the AMA Initiative to Transform Medical Education. She helped to establish the New England Medical Association,

EMBARGOED FOR RELEASE UNTIL 4:00PM JUNE 14 2013

a state society of the National Medical Association, which represents minority physicians and health professionals. Dr. Coombs has served as a member and vice chair of the Massachusetts Board of Registration in Medicine Patient Care Assessment Committee. In addition, she was a member of the Massachusetts Special Commission on the Health Care Payment System.

Thomas M. Dean, M.D., is a board-certified family physician who has practiced in Wessington Springs, SD, since 1978. He is chief of staff at Avera Weskota Memorial Medical Center. Dr. Dean is on the board of directors of Avera Health Plan and is past president of the South Dakota Academy of Family Physicians. He was president of the National Rural Health Association, and he published articles and presented on health care in rural areas. Dr. Dean received the Dr. Robert Hayes Memorial Award for outstanding rural health provider, received the Pioneer Award from the South Dakota Perinatal Association, and was awarded a Bush Foundation Medical Fellowship to study leadership and health policy. He was also named the 2009 National Rural Health Association's Practitioner of the Year. Dr. Dean earned his medical degree from the University of Rochester School of Medicine and Dentistry. His undergraduate degree is from Carleton College.

Bill Gradison, M.B.A., D.C.S., is a scholar in residence in the Health Sector Management Program at Duke's Fuqua School of Business. He was a member of the U.S. Congress (1975–1993) where he served on the House Budget Committee and the Health Subcommittee of the Committee on Ways and Means. Mr. Gradison was a founding board member of the Public Company Accounting Oversight Board and was vice chairman of the U.S. Bipartisan Commission on Comprehensive Health Care ("Pepper Commission"). Prior positions also include assistant to the Secretary of Health, Education, and Welfare; president of the Health Insurance Association of America; and vice chair of the Commonwealth Fund Task Force on Academic Health Centers. Mr. Gradison received his B.A. from Yale University and an M.B.A. and doctorate from Harvard Business School.

Glenn M. Hackbarth, J.D., M.A., chairman of the Commission, lives in Bend, OR. He was chief executive officer and one of the founders of Harvard Vanguard Medical Associates, a multispecialty group practice in Boston that serves as a major teaching affiliate of Harvard Medical School. Mr. Hackbarth previously served as senior vice president of Harvard Community Health Plan and president of its Health Centers Division as well as Washington counsel of Intermountain Health Care. He has held various positions at the U.S. Department of Health and Human Services, including deputy administrator of the Health Care Financing Administration (now known as CMS). He is immediate past-chairman of the board of the Foundation of the American Board of Internal Medicine. Mr. Hackbarth received his B.A. from Pennsylvania State University and his J.D. and M.A. from Duke University.

William J. Hall, M.D., M.A.C.P., is a doctor of internal medicine and professor of medicine at the University of Rochester School of Medicine where he directs the Center for Healthy Aging. Dr. Hall's subspecialty is in the field of geriatrics, with a major research interest in the development and promotion of programs in healthy aging, emphasizing preventive and wellness strategies for older adults. He has published over 150 scientific articles, reviews, and book chapters. He was instrumental in establishing a Program of All-Inclusive Care for the Elderly in Rochester, NY, and has directed the Division of Geriatrics at the University of Rochester School of Medicine. His contributions to physician education in the care of the elderly have been recognized nationally by the American Geriatrics Society, the John A. Hartford Foundation, and the Donald W. Reynolds Foundation. More recently his career has focused on systems of health care for older adults. Dr. Hall's prior service and positions include serving as a member of the Board of Directors of AARP (formerly American Association of Retired Persons), serving as president of the American College of Physicians, and serving in leadership positions in the American Geriatrics Society. He is the immediate past president of the International Society of Internal Medicine.

Jack Hoadley, Ph.D., is research professor at the Health Policy Institute of Georgetown University in Washington, DC. Dr. Hoadley previously served as director of the Division of Health Financing Policy for the Department of Health and Human Services Office of the Assistant Secretary for Planning and Evaluation; as principal policy analyst at MedPAC and its predecessor organization, the Physician Payment Review Commission; and as senior research associate with the National Health Policy Forum. His research expertise includes health financing for Medicare, Medicaid, and the Children's Health Insurance Program; pharmacoeconomics and prescription drug benefit programs; and private sector insurance coverage. Dr. Hoadley has published widely on health care financing and pharmacoeconomics and has provided testimony to government panels.

EMBARGOED FOR RELEASE UNTIL 6:00PM JUNE 15, 2015

Herb B. Kuhn is current president and chief executive officer of the Missouri Hospital Association (MHA), the trade association serving the state's 176 hospitals and health systems. Before joining MHA, Mr. Kuhn served in multiple roles at the Centers for Medicare & Medicaid Services, including as deputy administrator from 2006 to 2009 and as director of the Center for Medicare Management from 2004 to 2006. From 2000 to 2004, Mr. Kuhn served as corporate vice president for the Premier Hospital Alliance, serving 1,600 institutional members. From 1987 through 2000, Mr. Kuhn worked in federal relations with the American Hospital Association. Mr. Kuhn received his bachelor of science in business from Emporia State University.

George N. Miller, Jr., M.H.S.A., has, over the past two decades, managed a series of hospitals, leading financial turnarounds at four of them. Mr. Miller is the chief executive officer of Okmulgee Memorial Hospital in Okmulgee, OK. Previously, he was the president and chief executive officer of First Diversity Healthcare Group, a national health care consulting firm helping health care organizations improve their operations; regional president and chief executive officer of Community Mercy Health Partners; and senior vice president of Catholic Health Partners, a hospital chain in the Springfield, OH, area. He has run hospitals in Illinois, Texas, and Virginia and is a past president of the National Rural Health Association. Mr. Miller has been an adjunct professor for the master's of Health Care Services Administration for Central Michigan University since 1998. He has an undergraduate degree in business administration from Bowling Green State University and a master of science in health services administration from Central Michigan University.

Mary Naylor, Ph.D., R.N., F.A.A.N., is the Marian S. Ware professor in gerontology and director of the NewCourtland Center for Transitions and Health at the University of Pennsylvania School of Nursing. Since 1989, Dr. Naylor has led an interdisciplinary program of research designed to improve the quality of care, decrease unnecessary hospitalizations, and reduce health care costs for vulnerable community-based elders. Dr. Naylor is also the national program director for the Robert Wood Johnson Foundation program, Interdisciplinary Nursing Quality Research Initiative, aimed at generating, disseminating, and translating research to understand how nurses contribute to quality patient care. She was elected to the National Academy of Sciences, Institute of Medicine in 2005. She also is a member of the RAND Health Board, the National Quality Forum Board of Directors, and the immediate past chair of the Board of the Long-Term Quality Alliance. Dr. Naylor received her M.S.N. and Ph.D. from the University of Pennsylvania and her B.S. in nursing from Villanova University.

David Nerenz, Ph.D., is director of the Center for Health Policy and Health Services Research at the Henry Ford Health System in Detroit, MI, as well as director of outcomes research at the Neuroscience Institute and vice chair for research of the Department of Neurosurgery at Henry Ford Hospital. He has served on the National Committee for Quality Assurance's Culturally and Linguistically Appropriate Services Workgroup and on the Accountable Care Organization Technical Advisory Committee of the American Medical Group Association and has served as a principal on the Hospital Quality Alliance. Dr. Nerenz has served on several committees of the Institute of Medicine, including as chair of the Committee on Leading Health Indicators for Healthy People 2020. He serves on the editorial boards of *Population Health Management* and *Medical Care Research and Review*.

Rita Redberg, M.D., is professor of clinical medicine at the University of California at San Francisco (UCSF) Medical Center in San Francisco, CA. A cardiologist, Dr. Redberg is also director of Women's Cardiovascular Services at UCSF and adjunct associate at Stanford University's Center for Health Policy/Center for Primary Care and Outcomes Research. She is editor of *JAMA Internal Medicine* and a panel member on CMS's Medicare Evidence Development and Coverage Advisory Committee. Dr. Redberg has served in numerous positions on committees of the American Heart Association and the American College of Cardiology and was a Robert Wood Johnson Foundation Health Policy Fellow.

Craig Samitt, M.D., M.B.A., is president and chief executive officer of Dean Health System, Inc., an integrated delivery system and provider-sponsored health plan headquartered in Madison, WI. He has worked at Dean since 2006 and has led the organization through a transformation aimed at maximizing the system's focus as a national leader in "better care at a lower cost." Before joining Dean, Dr. Samitt served as chief operating officer of the Fallon Clinic (Reliant Medical), senior vice president at Harvard Pilgrim Health Care, and chairman of medicine and executive director of the Kenmore Center at Harvard Vanguard (Atrius Health). He is chair emeritus at the Group Practice Improvement Network, a learning consortium of large multispecialty groups, is a director

EMBARGOED FOR RELEASE UNTIL 10PM JUNE 14, 2013

on the Advocate Physician Partners Board, and has served as an advisory and faculty member of the Centers for Medicare & Medicaid Services' Accountable Care Organization Accelerated Development Learning Sessions. Dr. Samitt received his M.D. from Columbia University and his M.B.A. from the Wharton School.

Cori E. Uccello, F.S.A., M.A.A.A., M.P.P., is senior health fellow of the American Academy of Actuaries, serving as the actuarial profession's chief public policy liaison on health issues. Ms. Uccello focuses on issues related to health insurance financing, coverage and market reforms, and risk-sharing mechanisms. She recently served as a member of the Technical Review Panel on the Medicare Trustees' Report. Before joining the Academy in 2001, she was a senior research associate at the Urban Institute, where she focused on health insurance and retirement policy issues. She previously held the position of actuarial fellow at the John Hancock Life Insurance Company. Ms. Uccello is a fellow of the Society of Actuaries and a member of the American Academy of Actuaries. She received an undergraduate degree in math and biology from Boston College and a master's degree in public policy from Georgetown University.

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

Commission staff

Mark E. Miller, Ph.D.
Executive director

James E. Mathews, Ph.D.
Deputy director

Analytic staff

Christine Aguiar, M.P.H.
Catherine Bloniarz, M.S.
Carol Carter, Ph.D.
Evan Christman, M.P.Aff.
Zachary Gaumer, M.P.S.
David V. Glass, M.S.
Scott Harrison, Ph.D.
Kevin Hayes, Ph.D.
Dana Kelley, M.P.A.
Julie Lee, Ph.D.
Craig K. Lisk, M.S.
Kim Neuman, M.A.
Nancy Ray, M.S.
John Richardson, M.P.P.
Sara Sadownik, M.Sc.
Joan Sokolovsky, Ph.D.
Julie Somers, Ph.D.
Jeffrey Stensland, Ph.D.
Shinobu Suzuki, M.A.
Ariel Winter, M.P.P.
Daniel Zabinski, Ph.D.

Research assistants

Lauren Metayer
Katelyn Smalley

Assistant director

Arielle Mir, M.P.A.

Communications and policy assistant

Kahlie Dufresne

Administrative staff

Reda H. Broadnax, B.S.,
Executive officer
Wylene Carlyle
Paula Crowell
Timothy Gulley
Tina Jennings, MTESL
Cynthia Wilson

Staff consultants

Julian Pettengill
Carlos Zarabozo, A.B.

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 14, 2013

EMBARGOED FOR RELEASE
UNTIL 1:00PM
JUNE 12, 2013

MEDPAC Medicare Payment Advisory Commission

425 Eye Street, NW • Suite 701 • Washington, DC 20001
(202) 220-3700 • Fax: (202) 220-3759 • www.medpac.gov