

M A R C H 2 0 0 0

REPORT TO THE CONGRESS:

---

# Medicare Payment Policy

**MEDpAC** Medicare  
Payment Advisory  
Commission



The Medicare Payment Advisory Commission (MedPAC) is an independent federal body established by the Balanced Budget Act of 1997 (P.L. 105–33) to advise the U.S. Congress on issues affecting the Medicare program. The Commission’s statutory mandate is quite broad: In addition to advising the Congress on payments to health plans participating in the Medicare+Choice 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 a wide range of 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 a full-time executive director and a staff of analysts, who typically have backgrounds in economics, health policy, public health, or medicine.

The Commission’s work is organized around an analytic cycle that begins in June, when Commissioners meet to discuss the analytical issues and policy questions they wish to address in the coming year. Over the summer, the Commission staff translates the results of that discussion into a research agenda. In September, the Commission begins a series of monthly public meetings to discuss the results of staff research and to formulate recommendations.

Two reports—the primary outlet for Commission recommendations—are required by statute to be issued in March and June each year. Over the next two years, the Commission also will publish additional reports on a variety of subjects, including payment for care in rural areas, as required under the Balanced Budget Refinement Act of 1999. In addition to these reports, MedPAC advises the Congress through other avenues, including comments on reports to the Congress and proposed regulations issued by the Secretary of the Department of Health and Human Services, testimony, and briefings for congressional staff. This volume fulfills MedPAC’s requirement to submit an annual report to the Congress on Medicare payment policy.

M A R C H 2 0 0 0

**REPORT TO THE CONGRESS:**

---

# Medicare Payment Policy

**MEDPAC** Medicare  
Payment Advisory  
Commission

1730 K Street, NW • Suite 800 • Washington, DC 20006  
(202) 653-7220 • Fax: (202) 653-7238 • [www.medpac.gov](http://www.medpac.gov)

## Acknowledgments

---

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

Despite a heavy workload, staff members at the Health Care Financing Administration were particularly helpful during preparation of this report. We thank Ned Burford and staff in the Enterprise Databases Group, Dana Burley, Dan Driscoll, Paul Eggers, Kim Elmo, Frank Eppig, Joanne Francy, Maribel Franey, Pam Frederick, Mark Freedland, Dave Gibson, Joel Greer, Tom Hoyer, Bob Kuhl, Clare McFarland, Daniel McGrane, Ann Meadow, Chris Molling, Sue Nonemaker, Parashar Patel, Stephen Phillips, Carolyn Rimes, J. Donald Sherwood, Kim Skellan, Sarah Thomas, Armen Thoumaian, Bob Wardwell, Laurence Wilson, David Zanardelli, and Carlos Zarabozo.

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 Nancy Allen, Richard Averill, Brett Baker, Anil Bamezai, Stephanie Bernell, Tom Bradley, Cindy Brown, Betty Cornelius, Louis Diamond, Brian Ellsworth, Kurt Gillis, Marsha Gold, Michael Hadad, Gary Hart, Robert Hurley, Ed Kalman, Derrick Latos, Korbin Liu, Barbara Manard, Sharon McIlrath, Clyde Morris, Malcolm Morrison, Ira Moscovice, Keith Mueller, Patricia Neuman, John Newman, Wayne Nix, Margie Odle, Dena Puskin, Richard Rettig, Mark Segal, Cathy Sullivan, Deborah Williams, and Carolyn Zollar.

Once again, the skilled programmers at Social and Scientific Systems provided highly capable assistance as Commission staff analyzed data. In particular, we appreciate the hard work of Valerie Aschenbach, Tom Bell, Chris Brady, Daksha Damera, Deborah Johnson, Pal Khera, Jeff McCartney, Carl Newman, Charles Thomson, and Arlene Turner.

Finally, the Commission wishes to thank Kelley Albert, Anne Brown Rodgers, Nancy E. Volkers, and Myra J. Humphries for their contributions to the design, organization, and editing of this report. ■

# Table of contents

---

<b>Acknowledgments</b> .....	<b>iii</b>
------------------------------	------------

<b>Tables</b> .....	<b>vii</b>
---------------------	------------

<b>Figures</b> .....	<b>xi</b>
----------------------	-----------

<b>Executive summary</b> .....	<b>xiii</b>
--------------------------------	-------------

## Chapters

<b>1 Recent changes in the Medicare program</b> .....	<b>1</b>
---	----------

Factors leading to the Medicare provisions in the Balanced Budget Act .....	<b>4</b>
---	----------

A summary of the Balanced Budget Act and the Balanced Budget Refinement Act .....	<b>6</b>
--	----------

Evaluating the impact of the recent changes .....	<b>13</b>
---	-----------

<b>2 Medicare beneficiaries' access to quality health care</b> .....	<b>19</b>
--	-----------

Beneficiary characteristics associated with access and satisfaction .....	<b>22</b>
---	-----------

Access to care in the traditional Medicare program .....	<b>23</b>
--	-----------

Access to care in the Medicare+Choice program .....	<b>30</b>
---	-----------

Medigap insurance and access to care .....	<b>34</b>
--	-----------

Trends in beneficiaries' financial liability over time .....	<b>37</b>
--	-----------

Need for continued monitoring of beneficiary access to quality health care .....	<b>45</b>
---	-----------

<b>3 Revising payment methods and monitoring quality of care in traditional Medicare</b> .....	<b>49</b>
--	-----------

Rethinking payment for post-acute care .....	<b>55</b>
--	-----------

Monitoring the quality of post-acute care .....	<b>61</b>
---	-----------

Refining payments for inpatient care in prospective payment system hospitals .....	<b>69</b>
---	-----------

Improving payment for physicians' services and care in hospital outpatient departments .....	<b>88</b>
---	-----------

<b>4 Updating payment rates in traditional Medicare</b> .....	<b>97</b>
---	-----------

MedPAC's general framework for updating payments .....	<b>100</b>
--	------------

Applying the general framework to updating skilled nursing facility payments .....	<b>103</b>
---	------------

Updating payments to physicians and ambulatory care facilities .....	<b>104</b>
--	------------

<b>5 Medicare+Choice: trends since the Balanced Budget Act</b>	<b>115</b>
Barely moving toward congressional goals	118
Why is it so hard to realize the Congress’s goals?	120
Addressing barriers to program goals through the Balanced Budget Refinement Act	124
Will the Balanced Budget Refinement Act changes help achieve the Congress’s goals for the Medicare+Choice program?	125
<b>6 Improving payment for end-stage renal disease services</b>	<b>127</b>
Paying for ESRD care in the traditional Medicare program and in Medicare+Choice	130
Payment update	136
Access to and quality of dialysis care	140
<b>Appendix</b>	
<b>A</b> Impact of MedPAC’s recommendations for reforming the disproportionate share hospital adjustment	149
<b>Acronyms</b>	<b>157</b>
<b>Terms</b>	<b>159</b>
<b>More about MedPAC</b>	
<b>Commission members</b>	<b>165</b>
<b>Commissioners’ biographies</b>	<b>167</b>
<b>Commission staff</b>	<b>173</b>

# Tables

---

<b>1</b>	<b>Recent changes in the Medicare program</b>	<b>1</b>
1-1	Inpatient hospital services	7
1-2	Outpatient services	9
1-3	Skilled nursing services and outpatient rehabilitation services	9
1-4	Home health services	10
1-5	Physician services	11
1-6	Medicare+Choice	12
1-7	Other provisions directly affecting beneficiaries	13
1-8	Change in Medicare growth rates by provider sector: before and after the Balanced Budget Act	14
<b>2</b>	<b>Medicare beneficiaries' access to quality health care</b>	<b>19</b>
2-1	Selected characteristics of noninstitutionalized traditional Medicare and Medicare+Choice enrollees, 1998	24
2-2	Access to care for noninstitutionalized beneficiaries in traditional Medicare, by selected beneficiary characteristics, 1998	29
2-3	Satisfaction with care for noninstitutionalized beneficiaries in traditional Medicare, by selected beneficiary characteristics, 1998	31
2-4	Access to care for noninstitutionalized beneficiaries enrolled in Medicare+Choice, by selected beneficiary characteristics, 1998	33
2-5	Satisfaction with care for noninstitutionalized beneficiaries enrolled in Medicare+Choice, by selected beneficiary characteristics, 1998	35
2-6	Percentage of Medicare beneficiaries' income spent on health care, 1992–1996	38
2-7	Percentage of income spent on health care by low-income beneficiaries, 1992–1996	40
2-8	Out-of-pocket spending on health care by category for all beneficiaries, 1992–1996, adjusted for inflation	41
2-9	Distribution of 1995 and 1996 percentage of beneficiaries' income spent on health care, by level of 1994 percentage of income spent on health care	42
2-10	Out-of-pocket spending on care provided in long-term care institutions, 1992–1996, adjusted for inflation	42
2-11	Percentage of income spent on health care by beneficiaries with different coverage, 1992–1996	43
2-12	Out-of-pocket spending on health care by beneficiaries with different coverage, 1992–1996, adjusted for inflation	43
2-13	Income distribution of managed care enrollees and beneficiaries with Medigap who have access to managed care, 1996	44

2-14	Previous year supplemental insurance for beneficiaries in traditional Medicare and first-year Medicare+Choice enrollees who were in traditional Medicare, noninstitutionalized population	44
2-15	Percentage of aggregate expenditures on various budget items, 1996	45
<b>3</b>	<b>Revising payment methods and monitoring quality of care in traditional Medicare</b>	<b>49</b>
3-1	Home health users, average and median visits per user in 1994, 1997, and 1998	56
3-2	Dimensions, levels of severity, and items used for the home health case-mix system	58
3-3	RUG-III classification groups consistent with Medicare coverage criteria	60
3-4	Distribution of outpatient therapy users, payments, and average payments, by setting, 1996	62
3-5	Characteristics of selected patient assessment data sets	68
3-6	Change in total payments under combined payment for hospital operating and capital costs	72
3-7	Current policies and incremental case-mix refinement policy options	75
3-8	Cases in DRG 14, by APR-DRG and severity class, 1997	75
3-9	Average standardized cost for cases in DRG 14, by APR-DRG and severity class, 1997	76
3-10	Average absolute differences in standardized cost from group means, DRG 14 and refined DRGs, 1997	76
3-11	Aggregate average percent change in payments compared with current policies for three case-mix refinement options	77
3-12	Estimated distribution of hospitals by percent change in payments compared with current policies under each policy option, for selected hospital groups	80
3-13	Diagnosis related groups selected for expansion of transfer payment policy, 1999	82
3-14	Impact of expanded transfer policy on Medicare prospective payment system payments, by diagnosis related group, 1999	83
3-15	Percentage change in total payments due to recommended disproportionate share hospital policy changes, by threshold level and public/private teaching status	87
3-16	Percentage change in total payments due to recommended disproportionate share policy changes, by threshold and urban/rural ownership	87
3-17	Average allowed charges for high-volume evaluation and management services, by level of visit, 1998	90
3-18	Change in evaluation and management service coding, by type of service, 1993–1998	92

<b>4</b>	<b>Updating payment rates in traditional Medicare</b>	<b>97</b>
4-1	Components of MedPAC’s general framework for updating payments	101
4-2	Expenditure shares for selected physicians’ services provided in ambulatory care settings, by setting, 1994–1998	108
4-3	Expenditure shares for high-volume physicians’ services provided in inpatient and ambulatory care settings, 1994–1998	111
4-4	Simulated effects of an expanded sustainable growth rate system	113
<b>5</b>	<b>Medicare+Choice: trends since the Balanced Budget Act</b>	<b>115</b>
5-1	Medicare+Choice contract terminations and service area reductions	118
5-2	Beneficiaries with risk plans available, 1997–2000	118
5-3	Availability of plans with selected benefits, 1999–2000	120
<b>6</b>	<b>Improving payment for end-stage renal disease services</b>	<b>127</b>
6-1	Examples of separately billable laboratory tests and drugs	131
6-2	Calculating payments for patients with ESRD in Medicare+Choice	134
6-3	Medicare per capita monthly payment rate for ESRD demonstration enrollees in California, 2000	135
6-4	Productivity of dialysis facilities, by facility size, 1998	137
6-5	Trends in productivity for freestanding dialysis facilities, 1991–1998	138
6-6	Payment-to-cost ratios for composite rate payments for freestanding dialysis facilities, by dialysis modality and facility characteristics, 1991–1998	139
<b>A</b>	<b>Impact of MedPAC’s recommendations for reforming the hospital disproportionate share adjustment</b>	<b>149</b>
A-1	Percentage change in total payments due to recommended disproportionate share policy changes, by threshold and total margin quartile	151
A-2	Percentage change in total payments due to recommended disproportionate share policy changes, by threshold and hospital location	152
A-3	Percentage change in total payments due to recommended disproportionate share policy changes, by threshold and teaching status	152
A-4	Percentage change in total payments due to recommended disproportionate share policy changes, by threshold and proportion of Medicare and Medicaid patient shares	152
A-5	Selected payer cost shares by public/private teaching status	153
A-6	Proportion of total Medicare costs, by public/private teaching status	153

# Figures

---

<b>1</b>	<b>Recent changes in the Medicare program</b> .....	<b>1</b>
1-1	1997 view of Medicare growth .....	<b>4</b>
1-2	Hospital Insurance Trust Fund: 1996 projections .....	<b>5</b>
1-3	Hospital Insurance Trust Fund: 1999 projections .....	<b>14</b>
1-4	Aggregate Medicare spending, fiscal years 1992–2010 .....	<b>15</b>
<b>3</b>	<b>Revising payment methods and monitoring quality of care in traditional Medicare</b> .....	<b>49</b>
3-1	Percentage change in payments for option 1 and option 3, compared with current policies, by discharge volume, urban and rural hospitals .....	<b>78</b>
3-2	Distribution of hospital inpatient evaluation and management services for subsequent care, by HCFA Common Procedure Coding System code, 1993–1998 .....	<b>91</b>
<b>4</b>	<b>Updating payment rates in traditional Medicare</b> .....	<b>97</b>
4-1	Distribution of codes for visits by new patients to physicians and outpatient departments, 1998 .....	<b>110</b>
4-2	Distribution of codes for visits by established patients to physicians and outpatient departments, 1998 .....	<b>110</b>
<b>5</b>	<b>Medicare+Choice: trends since the Balanced Budget Act</b> . . . .	<b>115</b>
5-1	Medicare+Choice (risk) plan enrollment .....	<b>121</b>

---

## **Executive summary**

---

## **Executive summary**

---

This report looks different from MedPAC's two previous reports to the Congress on payment policy. It begins to move toward work that integrates discussions of payment, access, and quality, and highlights the key policy issues Medicare faces in paying for the range of care that beneficiaries receive. The report summarizes what we know about where the Medicare program is headed and presents MedPAC's views on a variety of issues, whether as recommendations or as work in progress. We will make additional payment recommendations in our June report on the financial condition of hospitals.

### **Recent changes in the Medicare program**

The Balanced Budget Act of 1997 (BBA) enacted the most far-reaching changes to the program since its inception, including reducing payment updates, instituting new prospective payment systems, adding benefits for preventive care, and allowing new types of private health plans to participate in Medicare. In response to concerns that the BBA had reduced spending too much, the Congress enacted the Balanced Budget Refinement Act (BBRA) in the fall of 1999. That law eased or delayed selected BBA provisions, thus increasing payments for many providers.

Because the BBRA has not been fully implemented, its impact cannot yet be assessed. Even for the BBA, analysis is constrained by a limited amount of data; an inability to tease out cause and effect given multiple, simultaneous policy and market changes; and the extended phase-in schedules of many policies. In addition, measuring beneficiaries' access to care—a critical indicator of the success of the program—is an imprecise science.

Any evaluation of the BBA's impact must attempt to balance Medicare's multiple roles and responsibilities. For example, although Medicare has a responsibility to ensure that beneficiaries have access to quality care, it must also be a prudent purchaser—paying a fair market price for the goods and services it buys. Medicare should not allow fraud and abuse or be expected to compensate providers for lost income from other payers. Lower-than-expected spending and poor provider financial performance, in and of themselves, do not indicate that the BBA missed its mark.

Ultimately, MedPAC is concerned about how the BBA and other policy changes affect beneficiaries' access to care. Are providers willing to care for them? Is the care they receive appropriate? Is the health care infrastructure sufficient to meet the needs of Medicare beneficiaries? The Commission has found no increase in systemic access problems, but is concerned that previous barriers for vulnerable populations persist.

### **Medicare beneficiaries' access to quality health care**

The BBA altered Medicare's payment policies in ways that could affect beneficiaries' access to quality care, such as by decreasing providers' willingness to serve them or by causing providers to reduce the value of the services they provide. Shifts to prospective payment for providers that were previously reimbursed on a cost basis could change the availability of certain services by altering incentives for providing them. Changes in payments to Medicare+Choice plans could reduce access to services for enrollees and reduce the extent to which plans offer additional benefits.

MedPAC believes there is little evidence that policy changes enacted in the BBA have harmed beneficiaries' access to care, but concludes that additional attention is warranted in some areas. The Commission's analysis of data from surveys of Medicare beneficiaries and our survey of physicians shows no increasing access problems, but there is some evidence that patients with greater needs may face difficulty in obtaining some types of post-acute care.

In a time of ongoing change in Medicare policies, continued close monitoring of access to care is essential. A focused effort to identify emerging access issues and evaluate the nature and scope of access problems is in order. Accordingly, the Commission recommends that the Secretary report annually to the Congress on findings from studies undertaken to examine potential problems in beneficiaries' access to care.

## **Revising payment methods and monitoring quality of care in traditional Medicare**

In its traditional fee-for-service program, Medicare uses separate payment systems to compensate each type of provider for furnishing covered services. Some of these systems, such as those for hospital inpatient care and physicians' services, are well-established prospective payment systems (PPSs). Others, such as those for ambulatory care services and most post-acute care services, are being fundamentally changed in response to the BBA, which required the Health Care Financing Administration (HCFA) to replace its cost-based reimbursement methods with new PPSs.

To ensure that Medicare beneficiaries have access to necessary care in appropriate settings, both existing and new PPSs must yield payment rates that approximate the costs efficient providers would incur in furnishing high-quality care. Meeting this goal under varied market conditions in many different health care settings is a complex challenge because Medicare pays for thousands of covered products and services furnished by a multitude of providers—physicians and other health care professionals, hospitals and other facilities, and suppliers—in hundreds of markets nationwide. In carrying out our mandate to examine Medicare's payment policies, MedPAC has developed an analytic framework that guides our assessment of the changes under way, whether they involve refinements or significant rethinking.

MedPAC's framework for considering payment policy is structured around five major design elements common to all administered pricing systems:

- **the unit of payment**, which governs providers' ability to economize on the mix and quantity of services and other inputs needed to produce the unit;
- **product classification systems and relative weights**, which define distinct services or products expected to require different amounts of resources to produce and their expected relative costliness;
- **adjustments to payment rates**, which allow policymakers to account for differences in providers' circumstances, such as geographic variation in input prices or in the type of care delivered;
- **initial payment levels**, the base payment rates established when a new payment system is implemented; and
- **payment updates**, which account for changes over time in the efficient level of costs needed to produce a product or service.

In Chapter 3, we discuss the first three elements, which determine the distribution of payments among specific services and providers, and make recommendations as they apply to post-acute care, hospital inpatient services, and physicians' services. (MedPAC made recommendations with respect to the new payment system for hospital outpatient services in our March 1999 report and will revisit those recommendations when pending refinements by HCFA are announced.) In Chapter 4, we discuss the last two elements, which govern the amount of money in the payment system.

## **Rethinking payment for post-acute care**

Payment systems for virtually all post-acute care providers are changing from cost-based to prospective payment in response to mandates in the BBA and the BBRA. Payment for care in skilled nursing facilities (SNFs) has been prospective since July 1, 1998, and payment for both home health and inpatient rehabilitation services will be made prospectively beginning October 1, 2000. Payment for outpatient therapy services has been made on the basis of the physician fee schedule since January 1, 1999. These changes raise two issues: whether the design elements of the new payment systems are appropriate and how policymakers can best monitor their impacts on the quality of post-acute care.

Over the next year, home health agencies will face the biggest change in payment policy as HCFA implements a PPS for home health services. The unit of payment under the proposed system is a 60-day episode of care, with Medicare's payment intended to cover all home health goods and services (other than durable medical equipment) once a low-use threshold has been crossed. The PPS will classify patients using Home Health Resource Groups that assign patients to one of 80 different groups, with relative payment rates for each group reflecting different severity levels and needs for care. The labor-related component of payments will be adjusted for variation in local wages.

MedPAC generally supports the agency's approach and believes the new system should be carried out as scheduled. In the short run, the Secretary should use data that home health agencies have been submitting since August 1999 to refine the system's case-mix adjustment and stabilize rates for the smallest case-mix classification groups. Once the PPS is implemented, the Secretary should vigorously monitor home health agency behavior to detect attempts to manipulate the new payment system. Over the long run, MedPAC believes the Congress should modify the PPS to blend fixed-episode payments and per-visit payments. Such a blended system could counteract some of the incentives to stint on care that would exist under a pure episode-based system.

Under the PPS for skilled nursing facilities, SNFs are paid a case-mix adjusted per diem rate for each patient, which is intended to cover all routine, ancillary, and capital costs. Patients are assigned to one of 26 different groups using the Resource Utilization Group, Version III (RUG-III) classification system. The RUG-III classification system reflects treatment costs that are correlated with staff time, but not the use of ancillary services, raising concerns that the PPS underpays for patients who require both therapy and nontherapy ancillary services. In response to these concerns, the Congress increased payments for 12 RUGs covering medically complex cases and three select rehabilitation RUGs. MedPAC believes these increases are only temporary measures and do not solve the underlying problems inherent in the classification system. HCFA is currently studying revisions to the system.

In our March 1999 report, MedPAC recommended that the PPS for inpatient rehabilitation services be discharge based and use the Functional Independence Measure-Functional Related Groups classification system. The Congress enacted this recommendation into law in the BBRA, and HCFA is expected to issue an implementing regulation this spring. MedPAC will revisit this issue when the regulation is issued.

## **Monitoring the quality of post-acute care**

The move to prospective payment—in progress or planning stages for most post-acute care services—provides a strong motive to create systems for monitoring the quality of care beneficiaries obtain. Payment systems designed to reward efficiency could cause quality problems if providers adopt cost-containment strategies that inappropriately reduce the intensity, duration, or skill level of the services they furnish. If payment levels

are set too low—either overall or for certain types of patients—access problems could result.

At present, Medicare’s ability to monitor the quality of care in post-acute settings is limited, although HCFA has taken a number of steps to generate information on the quality of care furnished by certain types of post-acute care providers. MedPAC supports the intent of HCFA’s efforts, but recommends enhancing or redirecting them by developing quality monitoring systems for all types of post-acute care providers, coordinating these systems across providers, and using both common core measures and additional measures as needed in particular settings. Finally, the Commission recommends that the Secretary take steps to increase the utility of patient assessment data now being collected while reducing the burden on providers and beneficiaries.

### **Refining payments for inpatient care in prospective payment system hospitals**

The main features of the prospective payment system that Medicare uses to pay for inpatient hospital care have remained remarkably stable for almost two decades. MedPAC’s current work focuses on policy issues related to four components of the payment system:

- whether Medicare should continue to make separate operating and capital payments,
- whether Medicare could improve the accuracy of its PPS payments,
- whether Medicare’s expanded transfer policy is appropriate, and
- how Medicare can improve its payments to providers who serve a disproportionate share (DSH) of low-income patients.

MedPAC recommends that the Congress combine operating and capital payment rates for hospital inpatient care. Such a change would simplify the hospital PPS, reduce the costs and complications of maintaining it, and clarify incentives facing hospitals. Combining payments would have no impact on aggregate payments, and payments would change minimally for major classes of hospitals.

In MedPAC’s August 1999 report to the Congress on payment policies for graduate medical education, the Commission promised to examine refinements to the inpatient PPS to improve payment accuracy and better capture differences in the severity of cases. MedPAC is evaluating three potential refinements in Medicare’s policies: changing the diagnosis related groups (DRG) patient classification system, altering the current methods of calculating the DRG relative weights, and changing how outlier payments are financed. This report presents preliminary findings from that evaluation.

Medicare’s transfer policy was initially intended to recognize that hospitals discharging patients to another hospital did not necessarily provide the full course of care implied by a full DRG payment. The BBA expanded the transfer policy beginning in fiscal year 1999 to cover discharges to post-acute care providers in 10 DRGs. MedPAC supports the concept underlying the expanded transfer policy, but believes its impact should be more fully understood before it is expanded to all DRGs.

Medicare’s DSH payments are intended to protect beneficiaries’ access to care in hospitals whose viability might otherwise be threatened by providing care to the poor. These payments are now made on the basis of a complex formula that measures care to the poor through the share of patient days accounted for by Medicaid enrollees and Supplemental Security Income recipients. As we have previously, MedPAC recommends changing the formula to include the costs of all poor patients. We also recommend making 60 percent of hospitals eligible for DSH payments.

## **Improving payment for physicians' services**

The physician payment issues addressed in this report relate to how services are classified for payment under the physician fee schedule. To promote accuracy in payments, HCFA has taken two steps. It has established documentation guidelines for an important group of services—evaluation and management services—and has required its contractors to use a set of established standards, called coding edits, to look for inconsistencies in code assignments. Because both of these steps have raised concerns among the medical community, MedPAC recommends that HCFA continue to work with physicians in developing and implementing them.

## **Updating payment rates in traditional Medicare**

To ensure that Medicare beneficiaries have access to care in an appropriate setting and to give providers incentives to supply that care efficiently, Medicare's base payment rates must account for variations in the prices of inputs that providers face, the mix of patients they see, or the particular bundle of services they provide. These base payments must also be updated over time; how that is done depends on policymakers' objectives. One possible objective is to maintain consistency with efficient providers' costs; another is to control program spending.

Medicare currently uses two different approaches to updating payments. One approach—used to update payments for inpatient hospital services—involves projecting factors expected to affect providers' costs in the coming year. The other approach—used to update physicians' fees—takes into account some of these factors, but provides for updates only when changes in program spending are consistent with an expenditure target.

As Medicare continues to implement PPSs for new categories of services, policymakers will need to make explicit update decisions that were once made implicitly. Payments previously determined on the basis of cost-based reimbursement—including payments for services provided by skilled nursing facilities, home health agencies, hospital outpatient departments, and rehabilitation hospitals—generally rose automatically as providers' costs increased. Under PPSs, payment rates will increase only when policymakers choose to increase them.

For settings where no expenditure target is in place, MedPAC has developed a general framework that accounts for the likely impact of three sets of factors on patient care costs. These factors include changes in the price of inputs, changes in the inputs used and the product or service produced, and changes in case mix. MedPAC has used this framework in the past to recommend updates for inpatient hospital services and will do so again in June when we report on hospitals' financial condition. The Commission is also developing the details of this framework as it applies to skilled nursing facilities.

Two factors make updating payments for ambulatory care challenging. First, these services may be provided in several different settings: hospital outpatient departments, ambulatory surgical centers, and physicians' offices. Other things being equal, Medicare should pay similarly for services, irrespective of the setting. Second, the Congress has already established an expenditure target for physicians' services and has directed HCFA to develop a method for controlling unnecessary increases in the use of hospital outpatient services. The agency has proposed an expenditure target as one way to fulfill that requirement.

Last year, concern about update consistency among ambulatory care settings prompted MedPAC to recommend a single mechanism that would link payment updates for these settings. However, based on further analysis and consideration, MedPAC has concluded that although consistency in updates is conceptually desirable, complex issues must be resolved before that goal can be achieved. Accordingly, the Commission recommends

that Congress not establish a single expenditure target to determine payment updates for physicians' services and ambulatory care facilities. Further, the Commission recommends that the Secretary not establish setting-specific expenditure targets.

### **Medicare+Choice: trends since the Balanced Budget Act**

The Congress had two explicit goals when it created the Medicare+Choice (M+C) program: to provide beneficiaries with greater choice in plan options and to help control the growth in Medicare spending. M+C was also important to members of the Congress who saw it as a way to provide Medicare beneficiaries with benefit packages richer than the traditional Medicare fee-for-service package, particularly with respect to coverage of outpatient prescription drugs.

Progress toward these goals has been halting. The rate of increase in program payments per beneficiary enrolled in M+C has slowed since enactment of the BBA, but the availability of plan options has not increased: most beneficiaries in rural areas still cannot enroll in M+C plans, benefit packages have become less generous, and enrollment growth in M+C plans has slowed.

Achieving all of the Congress's goals simultaneously has been difficult because they are partially at odds. For example, there is a basic conflict between the goals of controlling Medicare spending and providing richer benefits for beneficiaries. Slower payment growth has coincided with continuing rapid increases in the cost of outpatient prescription drugs. But factors other than payment rates have also contributed to the lack of progress. Some obstacles relate to data collection and quality improvement requirements enacted in the BBA that are more difficult for some plans to meet than for others. Other obstacles reflect fundamental market conditions. For example, the low population density and presence of few providers in many rural areas make it difficult for plans to form networks. Finally, the environment in the post-BBA world has been more uncertain than in the recent past. This uncertainty makes it difficult for plans to justify entering the program or new areas.

In the BBRA, the Congress undertook several steps to help the M+C program make progress toward the goal of expanding plan participation. First, it raised future payments to plans by increasing the update, delaying the phase-in of risk adjustment (which will reduce payment rates when fully implemented), and reducing the assessment for beneficiary education. Second, the Congress codified two regulatory provisions that HCFA had been following but which were not in law. One moves the deadline for plans to submit their applications for inclusion in M+C from May 1 to July 1. The other allows plans to segment their service areas along county lines and thus better match revenues to costs. Third, the BBRA established bonus payments to plans that enter areas where no other M+C plan is operating, a move intended to foster participation in rural areas. Finally, the act reduced requirements of the M+C quality assurance program for preferred provider organizations.

MedPAC believes that these congressional actions have the potential to succeed in providing Medicare beneficiaries with more coverage choices. The Commission supports the general thrust of the M+C provisions in the BBRA and will continue to monitor the program's progress toward its goals.

### **Improving payment for end-stage renal disease services**

MedPAC has examined the current system of paying for the care of patients with end-stage renal disease (ESRD) to ask whether it meets Medicare's payment policy objectives. These objectives include controlling costs; providing cost-effective, quality care to patients using the most suitable modality in the most suitable setting; and promoting access to services.

Under current law, patients with ESRD are prohibited from participating in the M+C program unless they were already enrolled before they developed ESRD. This prohibition reflects concerns that limitations in the current payment system make it inconsistent with providing high-quality care to enrollees with ESRD. MedPAC recommends that the Secretary risk-adjust payments for patients with ESRD enrolled in Medicare+Choice. Once a risk-adjusted payment system has been implemented— together with a system to monitor and report on the quality of care—the Congress should lift the prohibition. In the meantime, MedPAC also recommends that ESRD patients who lose M+C coverage because their plan leaves the area should be permitted to enroll in another plan.

In the traditional Medicare program, MedPAC recommends increasing the composite rate for outpatient dialysis services. The Commission also recommends that the Congress require HCFA to review the composite rate payment annually.

CHAPTER

1

---

**Recent changes in the  
Medicare program**

---

## Recent changes in the Medicare program

**I**n the past three years, Medicare has undergone considerable change. First, the Balanced Budget Act of 1997 enacted the most far-reaching changes to the program since its inception. The changes included reducing annual payment updates, implementing new prospective payment systems, adding preventive care benefits, and expanding choice of managed care plans. Then, in response to concerns that Balanced Budget Act policies cut provider payments too severely, the Congress enacted the Balanced Budget Refinement Act in the fall of 1999. These changes were smaller in scope than those enacted by the Balanced Budget Act, but were clearly important to the provider groups that pressed for their passage. Lastly, in the midst of debate on the Balanced Budget Refinement Act and contrary to all projections, Medicare experienced its first decline in annual spending. Although an objective, immediate assessment of the impact of these changes is constrained by data limitations and the phase-in schedules of many policy changes, available evidence suggests that no widespread problems in beneficiary access to care have occurred. However, previous problems with vulnerable populations persist and some studies suggest that access to certain services has been compromised by the Balanced Budget Act. As a result, continued monitoring is warranted.

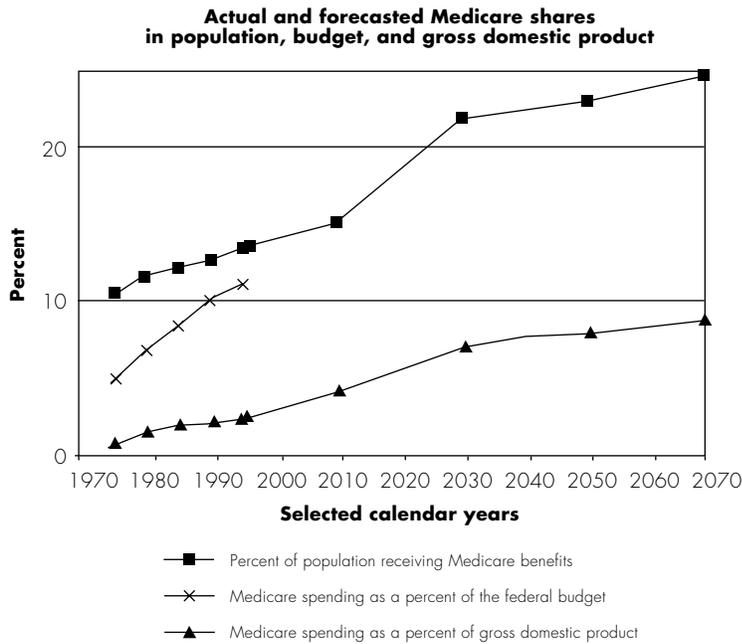
### In this chapter

---

- Factors leading to the Medicare provisions in the Balanced Budget Act
  - A summary of the Balanced Budget Act and the Balanced Budget Refinement Act
  - Evaluating the impact of the recent changes
-

**FIGURE  
1-1**

## 1997 view of Medicare growth



Source: Congressional Budget Office. Long-term budgetary pressures and policy options, March 1997.

This chapter summarizes the factors leading to the Medicare provisions in the Balanced Budget Act of 1997 (BBA) and the Balanced Budget Refinement Act, (BBRA) enacted in the fall of 1999, and summarizes the major provisions of each piece of legislation. To the extent possible, the chapter assesses the impact of these changes. It discusses changes in Medicare spending and identifies factors other than the BBA—such as improved compliance with payment rules, administrative delays, and broader health care market dynamics—that have contributed to changes in Medicare spending, as well as in provider participation rates and financial performance. It concludes that the Commission is concerned about how the BBA and other policies affect beneficiaries’ access to care, and briefly summarizes the Commission’s conclusions about access to care.

### Factors leading to the Medicare provisions in the Balanced Budget Act

The Medicare provisions in the BBA were a reaction to a combination of factors, including mounting fiscal pressures (recent rapid growth in Medicare spending, disturbing projections of future growth, and the then-projected depletion of the hospital insurance trust fund in fiscal year (FY) 2001); evidence that Medicare was overpaying some providers; and a consensus for the need to introduce better incentives than available under cost reimbursement. In addition, policymakers wanted to reform the program to offer beneficiaries greater choice among managed care plans and more coverage for preventive services. The following discussion addresses each of these factors in greater detail.

### Mounting fiscal pressures

In 1997, the Congress faced a Medicare program with an annual growth rate of more than 8 percent; some sectors, such as home health, had annual growth rates of more than 30 percent. The program commanded an increasing share of the federal budget and was projected to crowd out discretionary spending. Balancing the budget without increasing tax rates or reducing other spending required slowing the rate of growth in the Medicare program.

Figure 1-1 illustrates the magnitude of the problem. Medicare beneficiaries made up 13.7 percent of the population in 1996. By 2010, this percentage was projected to increase to 15.2 percent; by 2030, to 22 percent. Medicare spending was 2.7 percent of gross domestic product (GDP) in 1996, and was projected to grow to 4.4 percent by 2010 and to 7.4 percent by 2030.

However, it was the growth of Medicare as a percent of the entire federal budget that many policymakers found particularly disturbing. At 11.3 percent of the total budget in 1995, Medicare’s share had more than doubled since 1975 and represented the budget’s third-largest program. Some feared that the program’s seemingly relentless growth would crowd out discretionary spending, even if the federal budget grew as fast as GDP.

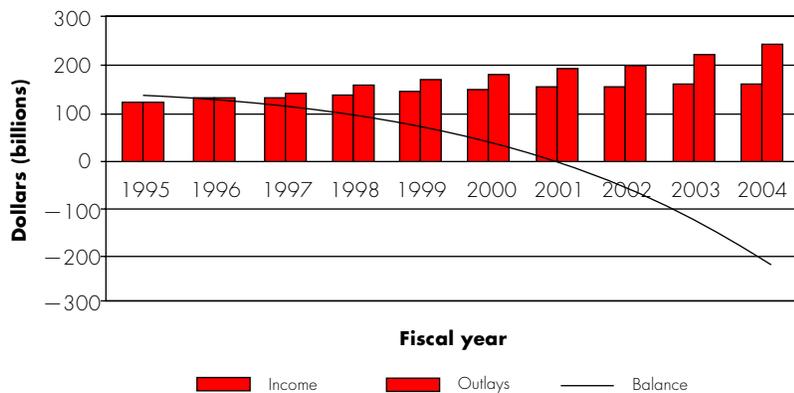
In addition to general fiscal pressures, projections showed that the Hospital Insurance Trust Fund (which funds Part A of Medicare) would be depleted in 2001, well before the retirement of the “baby-boomer” generation. As shown in Figure 1-2, income to the trust fund (chiefly payroll tax) was about equal to outlays in 1995. After that date, outlays were projected to exceed income every year.

### Evidence of overpayment to providers and health plans

As fiscal pressures mounted, evidence suggested that Medicare was overpaying some providers, both as a result of payments per unit that significantly exceeded costs and because of incentives

**FIGURE 1-2**

## Hospital Insurance Trust Fund: 1996 projections



Source: 1997 Federal Hospital Insurance Trust Fund report.

In addition, studies suggested that the growth in Medicare managed care enrollment—instead of producing savings, as was the experience in the private sector—was actually increasing costs. Health plans tended to enroll healthier-than-average beneficiaries, while being reimbursed for the cost of caring for beneficiaries with average health status. This mismatch was estimated to result in overpayment of between 5 and 7 percent (Riley 1996). Because enrollment in the Medicare risk health maintenance organization (HMO) plans was increasing rapidly—from 1.3 million in 1990 to 4.5 million in 1997—overpayments were becoming increasingly costly.

### Consensus on the need to introduce more rational payment methods

Increasingly, policymakers recognized the limitations of the cost-based reimbursement of certain providers and of administered pricing in general. To varying degrees, policymakers sought to develop prospective payment systems for providers currently subject to cost reimbursement and to experiment with private sector innovations, such as competitive bidding for goods and services.

### Prospective payment systems

The Health Care Financing Administration (HCFA) implemented a PPS for hospital inpatient services in 1983, which led to reduced spending growth and increased efforts by hospitals to control costs, as evidenced by shorter lengths of stay and increasing margins. In 1992, HCFA implemented a physician fee schedule that set payments for services in advance and limited aggregate spending growth.

In general, expected PPS benefits included a more aggregate unit of payment that would remove the incentive to add services to a particular episode and a prospectively determined rate that meant providers could keep the rewards if they cut their costs. A PPS system also provided policymakers with a tool to control spending directly, through base

in the payment systems that rewarded using excessive services. A consensus developed on the need to correct these trends through a variety of approaches, including developing prospective payment systems (PPSs) and reducing annual payment updates.

One of the statistics most widely cited as evidence of overpayment was the hospital inpatient margin, which reflects the difference between Medicare payments and Medicare-recognized costs for hospitals receiving PPS payments. Margins had been increasing since 1991, when they were  $-2.4$  percent, and were projected to reach 12.7 percent in 1997 (ProPac 1997). This growth was related to growth in spending for home health and skilled nursing facility (SNF) care, as hospitals transferred some patients to post-acute settings for care previously provided on an inpatient basis. Hospitals had an incentive to discharge patients earlier under a PPS, because they would receive the same diagnosis related group payment regardless of the patient's actual length of stay. Because many of the patients discharged earlier required continued care, spending for SNF and home health care increased. Hospitals also had additional incentives to transfer patients to hospital-owned SNFs or home

health care services, because they would not only receive the inpatient payment, but also the cost-based payments for care delivered in the other settings.

The increase in home health and SNF spending also raised concerns about whether cost-based reimbursement was creating incentives for overutilization and, in turn, excessive spending. Home health spending nearly quintupled in six years, going from \$3.5 billion (3.5 percent of Medicare spending) in 1990 to \$16.9 billion (8.8 percent) in 1996. The numbers of home health agencies, beneficiaries being served, and visits per beneficiary all increased, as did evidence of management problems, fraud and abuse, and the provision of unnecessary services (Grob 1997). SNF spending also increased dramatically, from \$2.5 billion in 1990 to \$11.3 billion in 1996. During this period, the number of people receiving care in SNFs doubled and the cost per day tripled, largely as a result of the increased use of ancillary services, such as physical and occupational therapy. These statistics, combined with the increase in the number of hospital-based SNFs (from 1,145 in 1990 to 2,088 in 1996) and more infrequent review of bills, raised questions as to whether these spending increases were appropriate.

payments and updates. Similar benefits were expected from extending PPS payment systems to other services, such as home health, SNF, hospital outpatient, and hospitals not already covered by the current PPS system, including rehabilitation and long-term care hospitals.

### **Competitive pricing of medical supplies and services**

In their search for better payment methods, policymakers looked to private-sector innovations. The private sector had tested competitive bidding, asking providers and suppliers to name their best prices and basing payment or participation in the program on those prices, or “bids.” Some believed this approach had advantages over the current system, in which prices often were set without information on the true costs of production.

Some policymakers were particularly interested in testing this new approach to determine payments for non-physician Part B services and payments to managed care plans. The Office of Inspector General and others had noted that the Medicare program was paying more for durable medical equipment (DME) than were other federal purchasers. Among non-physician Part B services, DME seemed like a good candidate for a competitive bidding demonstration.

Policymakers also were interested in using competitive bidding for managed care payments. Before the BBA was passed, payments were arbitrarily set at 95 percent of local fee-for-service (FFS) payments. Frustration with this approach spurred interest in testing competitive bidding for managed care to get a more accurate sense of the relative efficiency of managed care compared with FFS. Several attempts to demonstrate this approach were made in Baltimore and Denver in the mid-1990s, but opposition from plans, providers, and beneficiaries derailed the efforts. Some believed that a legislative mandate was needed to overcome opposition.<sup>1</sup>

### **Interest in expanding managed care choices for beneficiaries**

Although choices available to people in the private insurance market were expanding—from indemnity and HMO plans to preferred provider organizations, HMOs with a point-of-service option, and others—most Medicare beneficiaries still were limited to either the traditional Medicare FFS plan or HMOs, and many areas of the country had no HMO alternative.

At that time, HMO alternatives were limited to a small Medicare cost HMO program and a rapidly expanding Medicare risk HMO program, in which participating plans were paid a capitated amount based on FFS spending in beneficiaries’ counties of residence. This payment method led to beneficiaries in some higher-payment counties getting generous benefit packages and paying no premiums, while beneficiaries in lower-payment counties received fewer benefits and paid premiums.

To ameliorate some of these inequities and to allow more types of plans to participate in the program, the Congress included provisions in the BBA intended to create more managed care options in more counties.

### **Interest in more coverage of preventive services**

Policymakers also were interested in adding coverage for preventive services; many believed this coverage would improve beneficiaries’ health status and quality of life and produce Medicare savings in the long run. There was neither clear evidence of potential savings nor consensus in the medical community on the merit of covering certain preventive services. However, the Congress and the Administration were ready to act.

## **A summary of the Balanced Budget Act and Balanced Budget Refinement Act**

In 1997, the Congress enacted the BBA, making the most far-reaching changes to the Medicare program since its inception. The law slowed the growth in payments to virtually all FFS providers and managed care plans and increased beneficiary premiums, for an estimated savings of \$112 billion between 1998 and 2002. These savings, combined with a shift in the financing of many home health services from the Part A to the Part B trust fund, extended the projected depletion date of the Hospital Insurance Trust Fund by about six years (through early 2007). In addition, new types of managed care products were authorized and Medicare coverage was expanded for several preventive care services.

The legislation achieved reductions in provider payments through similar types of policy changes across provider groups. One recurring policy change reduced the annual update adjustment for providers paid under existing prospective payment methods. This policy was enacted for inpatient hospitals, physicians, and managed care plans. Another type of policy change created new PPSs for providers previously paid under cost-based reimbursement, which allowed Congress to adjust the new payment components under these systems to produce savings. For example, most of the SNF and home health PPS savings were achieved by linking the base payment rate under PPS to the costs in a prior year in which SNF and home health costs were significantly lower. A third mechanism reduced formulaic payment adjustments; capital, indirect medical education, bad debt, and disproportionate share adjustments were all reduced to hospitals. Other changes were unique to a provider category, such as risk adjustment for managed care. Reductions in provider

<sup>1</sup> Even with legislative mandate, there was local and Congressional opposition to the implementation of later competitive pricing demonstrations in two new sites: Phoenix, AZ, and Kansas City, MO.

payments accounted for about \$99 billion of the estimated Medicare savings.

Another \$13 billion was saved through an increase in beneficiary premiums, which resulted from an increase in the percent of Part B costs paid by premiums and from the transfer of many home health services from Part A to Part B. The Congress considered, but ultimately rejected, increasing beneficiaries' contributions to the cost of their care by extending coinsurance obligations to home health services or relating Part B premiums to income.

Despite its unprecedented magnitude, the BBA did not fix the long-term financing needs of the program. Instead, it created the savings necessary to allow Congress more time to consider appropriate longer-term solutions for Medicare that would address the fundamental mismatch between spending projections and expected revenue growth.

However, within two years—before many BBA provisions had been put in place, and before the Congress was ready to address long-term Medicare reform—provider groups persuaded the Congress to revisit many BBA provisions and issues. These groups were concerned that many provisions had unintended consequences and that access to some Medicare services might be compromised. The result was the BBRA.

The BBRA increased Medicare spending by about \$16 billion over five years (FY 2000–2004). However, this increase was a small fraction of the roughly \$1.3 trillion expected to be spent by Medicare over the same time period.

The BBRA increased payments for hospitals, nursing homes, home health agencies, managed care plans, and other providers. The types of policy changes were relatively similar across provider categories and were largely motivated by concerns that access to care was adversely affected and providers were overly burdened. One type of change delayed implementing several BBA payment policies. For example, the legislation delayed the 15 percent reduction in home

**TABLE  
1-1**

**Inpatient hospital services**

**Prospective payment system hospitals**

<b>Major Balanced Budget Act provisions</b>	<b>Major Balanced Budget Refinement Act provisions</b>
Reduced annual hospital payment updates (FY 1999–2002): in 1998, update is zero; in 1999, MB minus 1.9 percent; in 2000, MB minus 1.8; in 2001 and 2002, MB minus 1.1.	Not addressed
Reduced DSH payments by 1 percent in 1998, 2 percent in 1999, 3 percent in 2000, 4 percent in 2001, 5 percent in 2002.	Froze the reduction in DSH formula to 3 percent in 2001, changed the reduction to 4 percent in 2002, and required the Secretary to collect hospital data on uncompensated care to assist in developing a new DSH payment system.
Reduced reimbursement for Medicare bad debts from 100 percent to 75 percent in 1998, 60 percent in 1999 and 55 percent in subsequent years.	Not addressed
Reduced capital payments 17.7 percent in FY 1998–2002.	Not addressed
Established a transfer policy for 10 high-volume DRGs, reducing payment rates when hospitals discharge patients in these DRGs to post-acute care facilities following unusually short stays.	Not addressed
Reduced IME and payment adjustment from pre-BBA level of 7.7 percent (for each 10 percent rise in teaching intensity) to 7.0 percent in 1998, 6.5 percent in 1999, 6.0 percent in 2000, and 5.5 percent in 2001 and subsequent years.	Reduced IME adjustment to 6.5 percent in 2000, 6.25 percent in 2001, and 5.5 percent in 2002 and subsequent years.
Carved IME and DME payments from HMO payments and gave them directly to teaching hospitals.	Not addressed
Established a cap on the number of residents supported by Medicare DME payments.	Established a national per-resident amount, reducing variation in DME payments by establishing a floor at 70 percent of the national average per-resident amount and imposing a temporary freeze for hospitals above 140 percent of the average.

(continued)

**TABLE  
1-1**

**Inpatient hospital services  
(continued)**

**Hospitals exempt from the prospective payment system**

<b>Major Balanced Budget Act provisions</b>	<b>Major Balanced Budget Refinement Act provisions</b>
Established PPS for inpatient rehabilitation hospitals and required a report on a PPS for LTC hospitals.	Requires that inpatient rehabilitation PPS be a per-discharge system using function-related groups; requires by 2002 the development and implementation of a per-discharge PPS for LTC and a per diem PPS for psychiatric hospitals.
Reduced annual payment updates; reduced capital payments for rehabilitation, LTC and psychiatric hospitals by 15 percent.	Not addressed
Capped payment to the 75th percentile of hospital-specific historic costs, adjusted for inflation (known as "target amounts").	Adjusted the labor-related portion of the 75th percentile cap to reflect geographic differences in wage-related costs.
Created numerous payment adjustments, including the opportunity for older hospitals to rebase, reducing bonus payments; targeting of relief payments, and instituting new payment criteria for certain start-up hospitals.	Increased bonus payments for eligible LTC and psychiatric hospitals until PPS implementation.
Established a rural hospital flexibility program and created a new designation: Critical Access Hospitals.	Modified the CAH program, including substituting the 96-hour LOS rule with 96-hour average LOS; allows certain for-profit hospitals or clinics to convert to CAH status.
Reinstated special payments to small, rural, Medicare-dependent hospitals.	Extended the Medicare-dependent hospital program for an additional five years.
Not addressed	Required MedPAC to conduct an assessment of all special payment provisions for rural hospitals and their impacts on access and quality.

Note: FY (fiscal year), MB (market basket), DSH (disproportionate share hospital), DRG (diagnosis related group), IME (indirect medical education), DME (direct medical education), HMO (health maintenance organization), PPS (prospective payment system), LTC (long-term care), CAH (critical access hospital), LOS (length of stay).

health PPS payments and instituted a two-year moratorium on therapy payment caps. A second change reduced the cuts for managed care, hospital disproportionate share payments and indirect medical education payments. A third type of change refined new payment methodologies, such as adding an outlier policy under the outpatient PPS and modifying the physician payment provisions to reduce oscillations in the new annual update formula. A fourth

change was intended to ease the transition to new payment systems. For example, the BBRA established temporary payment floors in the outpatient PPS and temporary higher SNF payments and home health payments under the interim payment system.

The BBRA also modestly reduced certain beneficiaries' out-of-pocket liability, through increased coverage of immunosuppressive drugs and limits in outpatient department coinsurance. These

savings to beneficiaries were offset by an increase in Part B premiums due to increases in Part B provider payments.

Major BBA and BBRA provisions are summarized below.

**Inpatient hospital services**

The BBA changed payments for inpatient hospital services in a number of ways. For PPS hospitals, the law provided for no update to operating payments in FY 1998 and limited updates from FY 1999–2002. It required phased reductions in the per-case adjustments for the indirect costs of medical education (IME) and, temporarily, for hospitals serving a disproportionate share (DSH) of low-income patients. It also reduced the payment rates when hospitals discharged patients in 10 high-volume diagnosis related groups (DRGs) to post-acute care facilities following unusually short stays. For PPS-exempt hospitals, the BBA reduced annual update adjustments and capped payment to the 75th percentile of hospital-specific historic costs, adjusted for inflation, known as target amounts. It also established a PPS for rehabilitation hospitals in FY 2001, among other changes.

The BBRA modified several BBA reductions. IME and DSH payments were increased, relative to the BBA provisions. Other changes were made to reduce geographic disparity in graduate medical education payments and to ease the transition to a PPS for certain PPS-exempt hospitals (Table 1-1).

**Outpatient hospital services**

The BBA enacted major changes in Medicare's payments for services provided in hospital outpatient departments. It eliminated the so-called formula-driven overpayment—under which Medicare's payments did not correctly account for beneficiaries' cost-sharing—and extended the reduction in payments for services paid on a cost-related basis. The law also directed the Secretary to establish a PPS for services paid at least partially on the basis of incurred costs.

**TABLE  
1-2**

**Outpatient services**

<b>Major Balanced Budget Act provisions</b>	<b>Major Balanced Budget Refinement Act provisions</b>
Established a PPS beginning FY 1999 (later delayed until 2000) (also see Table 1-7).	Eased transition to PPS by setting payment floors effective through 2003. Added outlier policy and allowed for cost reimbursement for certain drugs and supplies for three years (permanently exempts cancer hospitals; rural hospitals with fewer than 100 beds are exempt for four years).
Eliminated formula-driven overpayment, effective 1998.	Clarified that new outpatient PPS should not impose a reduction of 5.7 percent in addition to removal of the formula-driven overpayment.
Extended payment reduction for services paid on a cost-related basis through December 1999.	Extended payment reduction for services paid on a cost-related basis until implementation of PPS. (also see Table 1-7).

Note: PPS (prospective payment system), FY (fiscal year).

The BBRA eased the transition to a PPS by setting payment floors effective through 2003, adding an outlier policy to compensate for extremely high cost cases, and allowing cost reimbursement for certain drugs and supplies for three years. It also clarified how HCFA should calculate aggregate payments to hospitals in the first year of the PPS to mitigate the effect on hospitals. The legislation also limited beneficiary cost-sharing for an outpatient service to the Part A deductible after the PPS is implemented (Table 1-2).

**Services in skilled nursing facilities and rehabilitation services**

The BBA enacted a PPS for services provided in skilled nursing facilities (SNFs). Previously, these services were paid on the basis of costs, subject to limits on routine services. Under the new system, payments were intended to cover the routine, ancillary, and capital costs incurred in treating a SNF patient, including most items and services for which payment was previously made under Part B of Medicare. Patients in SNFs were classified under the Resource Utilization Group system, Version III (RUG-III), which groups patients by clinical characteristics for determining per diem payments.

The new payment system slows spending growth for SNF services by moving these facilities from cost-based reimbursement to federal rates based on average allowable per diem costs in FY 1995 (trended forward using the increase in the SNF market basket index, minus 1 percent). Because nursing home spending—particularly for ancillary services—grew rapidly between FY 1995 and FY 1997, using FY 1995 as the base for payment purposes reduced payments for many nursing homes. The PPS is being phased in over a four-year period that began in 1998. Payments in FY 1999 are based on a 50/50 blend of federal rates and facility-specific rates and will be based entirely on the federal rates as of FY 2001.

**TABLE  
1-3**

**Skilled nursing services and outpatient rehabilitation services**

<b>Major Balanced Budget Act provisions</b>	<b>Major Balanced Budget Refinement Act provisions</b>
<b>Skilled nursing services</b>	
Established a case-mix adjusted per diem PPS for SNFs, which will transition over four years beginning July 1, 1998.	Gives SNFs the option to be paid at a fully federal rate for the PPS.
Updated PPS payment rates by market basket minus one.	Not addressed
Not addressed	Increased payments for 15 categories of high-cost cases by 20 percent, effective April through September 2000.
Not addressed	Provided a temporary, across-the-board, 4 percent increase in payments in FY 2001-2002.
<b>Outpatient rehabilitation services</b>	
Effective January 1, 1999, established an annual per beneficiary limit of \$1,500 for all outpatient physical therapy services and a separate \$1,500 limit for all outpatient occupational therapy services (excluding services furnished by hospital outpatient departments).	Imposed a two-year moratorium (2000-2001) on therapy payment caps.

Note: PPS (prospective payment system), SNF (skilled nursing facility).

In response to the perception that the BBA reductions were too deep and inequitable, the BBRA included a 4 percent across-the-board increase in payments to SNFs for FY 2001 and 2002 and a 20 percent increase for 15 payment categories. These policies are temporary and will not be built into the base for PPS.

The BBA also established annual per beneficiary caps for outpatient rehabilitation services; these were suspended for two years (2000 and 2001) under BBRA (Table 1-3).

## Home health services

Before the BBA, home health agencies were paid on the basis of costs, subject to limits based on costs per visit. The BBA directed the Secretary to implement a PPS effective October 1999—since delayed by the Congress to October 2000—and established an interim payment system (IPS) intended to control spending growth until the PPS was in place.

The IPS reduced limits based on costs per visit and introduced agency-specific limits on average costs per beneficiary. Home health agencies are now paid the least of their actual costs, the aggregate per-beneficiary limit, or the aggregate per-visit limit. Agencies with a 12-month cost reporting period ending in FY 1994 are subject to per-beneficiary limits based primarily on average costs per beneficiary in FY 1994, trended forward using the home health market basket index.<sup>2</sup> Home health spending grew rapidly in the mid-1990s, so the use of FY 1994 as a base for payment led to substantial payment cuts for some home health agencies.

The BBRA provided some relief from the BBA reductions. It delayed a BBA-mandated 15 percent payment reduction to be imposed with PPS implementation, increased payments under IPS to certain agencies, and provided additional payment for administration of an outcome and assessment survey (Table 1-4).

## TABLE 1-4

## Home health services

### Major Balanced Budget Act provisions

### Major Balanced Budget Refinement Act provisions

Established a PPS for home health services, effective October 1999 (later delayed until October 2000).

Clarified that the payment update for 2002 and 2003 will be MB – 1.1 percent.

Authorized Secretary to collect data to develop a case-mix adjusted PPS (for example, data from the Outcome and Assessment Information Set).

Mandated that home health agencies receive \$10 for each new beneficiary administered the Outcome and Assessment Information Set questionnaire during cost-reporting periods beginning in FY 2000.

Established an IPS until PPS implementation. The IPS reduced limits based on costs per visit and introduced agency-specific limits on average costs per beneficiary, based on a blend of agency-specific costs and average per patient costs for agencies in the same region.

Required that per-beneficiary limits under the IPS be increased 2 percent in FY 2000 for agencies with limits below the national median.

Established a 15 percent across-the-board payment reduction, effective October 1999 (later delayed to October 2000).

Delayed 15 percent reduction until one year after implementation of the home health PPS; Secretary to report within six months of PPS implementation on the need for the 15 percent reduction.

Eliminated coverage for home health visits for the sole purpose of obtaining a blood sample.

Not addressed

Provided for the transfer of some home health spending from part A to part B.

Not addressed

Note: PPS (prospective payment system), MB (market basket), FY (fiscal year), IPS (interim payment system).

## Physician services

The BBA replaced the volume performance standard system, used to update physicians' fees, with a new sustainable growth rate (SGR) system. It also introduced a single conversion factor for all physician services, which reduced payments for some services and increased them for others. Finally, the BBA clarified requirements for payments to physicians for their practice costs.

Unlike some other BBA provisions, changes to Medicare's payments to physicians occurred almost immediately. January 1, 1998, HCFA implemented the single conversion factor and took the first

step toward revising practice cost payments. The effects of these changes were largest for some surgical procedures, such as cataract surgery, and for some orthopedic procedures, where payment rates fell by 13 percent or more. However, payments for office visits and some diagnostic services increased by at least 7 percent.

The BBRA made several adjustments to the BBA provisions, including modifying the SGR provisions to limit oscillations in the annual update to the conversion factor, and requiring that the SGR be calculated on a calendar-year basis. The BBRA also required the Secretary to conduct a study of the utilization of physicians' services

<sup>2</sup> New agencies, or those without a 12-month cost reporting period ending in FY 1994, are subject to the national median of the per-beneficiary limits for existing agencies.

**TABLE  
1-5**

**Physician services**

**Major Balanced Budget Act provisions**

**Major Balanced Budget Refinement Act provisions**

Introduced a single conversion factor for all physician services, effective January 1, 1998.

Required Secretary to make available each year an estimate of the conversion factor for physician services for the succeeding year.

Replaced volume performance standard with the SGR system, effective January 1, 1998.

Modified SGR provisions to reduce update oscillations and require estimate revisions; required Secretary to conduct a study on the use of physician services under the fee-for-service program. Required Secretary to correct estimates in previously issued SGRs with the best available data.

Reformed practice expense (office expenses) RVUs in the physician fee schedule; instituted a one-year delay in implementing proposed rule on practice expense reform; provided a five-year transition period for implementing a new method of calculating practice expenses; allowed a downpayment in 1998 toward implementing of new practice expense RVUs.

Required Secretary to establish a process for considering supplemental practice expense data.

Allowed beneficiaries to contract for health care services with physicians and other professionals who do not participate in the Medicare program; such contracts would not be subject to Medicare's payment limits.

Not addressed

Note: SGR (sustainable growth rate), RVUs (relative value units).

by Medicare beneficiaries, including the effects of improvement in medical capabilities, advancements in scientific technology, and other factors.<sup>3</sup>

Other provisions of the BBRA required the Secretary to correct estimates in previously issued SGRs with the best available data. The Secretary also must make available to MedPAC and the public each year an estimate of the SGR and the conversion factor applicable to physician payments for the succeeding year. Finally, the BBRA required the Secretary to establish a process for considering supplemental practice expense data (Table 1-5).

**Medicare+Choice plans**

Before Congress enacted the BBA, Medicare's payments to private health plans participating in the section 1876 risk contracting program were based on the average payments made on behalf of beneficiaries in its traditional FFS program living in the same county. The BBA severed this link by instituting a floor under county payment rates, blending local and national payment rates (subject to a so-called budget-neutrality provision), requiring a minimum update from the prior year, and removing the component of base rates attributable to spending for graduate medical education. Overall, the law limited updates to

payment rates in all counties by slowing the growth rate in national FFS spending and by subtracting a specified factor from that rate. The blending policy increased updates in some counties and reduced them in others.

In addition to changes in base payment rates, the BBA required HCFA to implement a new system of risk adjustment that considers the health status of enrolled beneficiaries. The law required HCFA to start the new system by January 1, 2000. The system will raise payments to plans for certain enrollees hospitalized in the year preceding the payment year and will reduce payments for other enrollees. Payment increases will depend on principal diagnoses associated with hospital admissions. HCFA proposed to phase in the new system over a five-year period and estimated that it would ultimately reduce average payment rates by 7.6 percent.

The BBRA modified the BBA by increasing the phase-in time for risk adjustment, trimming the reductions in growth rates and improving incentives for plans to participate in the program, among other policy changes (Table 1-6). Payment rates will also increase, as greater FFS spending leads to increased updates.

**Other provisions directly affecting beneficiaries**

The BBA added coverage for certain preventive care services, including pelvic screening exams, prostate and colorectal cancer screening tests, diabetes self-management training, and bone mass measurement for those at high risk for osteoporosis. It also expanded coverage for screening mammography. Beneficiary Part B premiums increased, both because they were set at 25 percent of Part B costs and as a result of the shift of home health services from Part A to Part B. In addition, the BBA expanded premium assistance for beneficiaries with incomes up to 135 percent of the poverty level, and created new assistance for beneficiaries with incomes of up to 175 percent of the poverty level. The BBA reduced

3 The study is due to the Congress within three years of enactment of the BBRA. MedPAC is required to analyze and evaluate the study and report to the Congress, with any appropriate recommendations, within 180 days of report submission.

**TABLE  
1-6**

**Medicare+Choice**

**Major Balanced Budget Act provisions**

**Major Balanced Budget Refinement Act provisions**

Created M+C program as Part C of Medicare, making substantial changes to the previous Medicare risk contracting program and eliminating the cost contract option in 2002.

Extended cost contract program through 2004.

Eliminated payment based on average payments made for beneficiaries in its traditional FFS program (by county) by establishing new payments as the greatest of: a blend of national and local payment amounts, minimum payment amount, or minimum update.

Not addressed

Carved out IME and GME payments from HMO payment rates over five years.

Not addressed

Required payments to be risk adjusted, effective January 1, 2000.

Created phase-in plan for risk adjustment that mitigates the Balanced Budget Act payment reductions scheduled for 2001 and 2002.

Limited updates to all counties by slowing the rate of growth in national FFS spending and by subtracting 0.5 percent from that rate.

Increased M+C capitation rates by trimming the reduction to FFS increases to 0.3 percent in 2002, adding bonus payments if a plan enters a county not previously served, and indirectly through FFS spending increases used to annually update the payment amounts for counties receiving the blend or the minimum payment amount.

Authorized PSOs, PPOs, MSAs (under demonstration authority) and private FFS plans to participate in M+C.

Exempted PPOs from the quality and information standards required of HMOs.

Provided for a five-year exclusion period if a plan withdraws from the M+C program.

Reduced the exclusion period from five to two years for organizations seeking to re-enter the M+C program after withdrawing.

Limited the enrollment and disenrollment periods for all plans (except MSAs) after 2001. Beneficiaries can enroll/disenroll once during the first six months of 2002 (or the first six months of eligibility). After 2002, the six-month time frame is reduced to three months. Special disenrollment rules apply for certain circumstances.

Not addressed

Required the Secretary to mail each beneficiary general information on Medicare and comparative information on available M+C plans. Mailing will be financed by a surcharge on plans.

Proportionally divided the cost of education program between FFS and managed care plans.

Authorized a competitive pricing demonstration project for HMOs.

Delayed competitive pricing demonstrations in Phoenix and Kansas City until at least January 1, 2002.

Not addressed

Extended Social HMO demonstration until 18 months after the Secretary submits a report for integration and transition of Social HMOs into an option under M+C.

Note: M+C (Medicare+Choice), FFS (fee-for-service), IME (indirect medical education), GME (graduate medical education), HMO (health maintenance organization), PSO (provider-sponsored organization), PPO (preferred-provider organization), MSA (Medical savings account).

**TABLE  
1-7**

**Other provisions directly affecting beneficiaries**

<b>Major Balanced Budget Act provisions</b>	<b>Major Balanced Budget Refinement Act provisions</b>
Permanently set Part B premiums at 25 percent of program costs and expanded premium assistance for low-income beneficiaries.	Not addressed
Not addressed	Increased coverage of immunosuppressive drugs for transplant patients.
Phased in a reduction in coinsurance for hospital outpatient services to 20 percent of each service’s payment rate.	Limited coinsurance for a hospital outpatient procedure to the Part A deductible.
Changed Medigap supplemental insurance by adding two standard plans that allow annual deductibles of \$1,500, prohibiting pre-existing exclusions for beneficiaries enrolling during guaranteed issue periods, and requiring guaranteed issue for beneficiaries who return to traditional Medicare within one year of enrolling in Medicare+Choice plans.	Not addressed
Provided coverage for certain preventive services, screening pelvic exams, prostate and colorectal cancer screening tests, diabetes self-management training services, and bone mass measurements for certain high-risk individuals. Expanded coverage of screening mammography.	Not addressed

coinsurance for outpatient services and added more choice among insurance options. It also added two Medigap options (each with a \$1,500 deductible) and required guaranteed issue for specified Medigap policies without pre-existing condition exclusions for certain continuously enrolled individuals.

The BBRA capped beneficiaries’ coinsurance obligations associated with outpatient procedures to the hospital inpatient deductible, increased coverage of immunosuppressive drugs, and indirectly led to higher Part B premiums as a result of increasing Part B spending (Table 1-7).

**Evaluating the impact of the recent changes**

Because the BBRA has not yet been broadly implemented, its impact cannot be assessed. Preliminary data on spending and access to care are available on the impact of the BBA, but analysis is constrained by a limited amount of data; an inability to tease out “cause and effect” given multiple, simultaneous policy and market changes; and the extended phase-in schedules of several policies, some of which have yet to begin. In addition, measuring beneficiary access to care—a critical indicator of the success of the program—is an imprecise science.

Even if comprehensive data were available, defining the BBA’s success

would not be simple. Any evaluation must attempt to balance Medicare’s multiple roles and responsibilities. For example, although Medicare has a responsibility to ensure that beneficiaries have access to quality care, it must also be a prudent purchaser—paying a fair market price for its goods and services. Medicare should not allow fraud and abuse or be expected to routinely compensate providers for lost income from other payers. Lower-than-expected spending and poor provider financial performance, in and of themselves, do not indicate that the BBA missed its mark.

**Recent Medicare spending levels**

As intended, the rate of growth of Medicare spending declined from pre-BBA levels (Table 1-8). Due to spending changes (including the home health shift) and growing payroll receipts, the estimated depletion date of the Part A trust fund has been revised to FY 2015 (Figure 1-3).

Spending reductions in FY 1998 and 1999 have been greater than projected; Medicare spending rose only 1.5 percent in 1998, compared with a projection of 5.7 percent by the Congressional Budget Office (CBO) when the BBA was enacted. In addition, for the first time in the history of the Medicare program, spending in 1999 actually declined, dropping by about \$1.7 billion (about 1 percent) instead of increasing by \$10 billion (about 5 percent) as projected.

However, HCFA’s Office of the Actuary and CBO project average annual increases of 6-7 percent between 2000–2010 (Figure 1-4) and sharper spending increases after the leading edge of the “baby-boom” generation becomes eligible for Medicare in 2010. Annual per capita spending is expected to increase an average of 5-6 percent between 2000–2010.

Nevertheless, since the passage of the BBA, many advocates for provider groups have expressed concern about the impact of payment reductions in the BBA.

**TABLE  
1-8**

**Change in Medicare growth rates by provider sector:  
before and after the Balanced Budget Act**

Service area	Percent average annual growth rate per FFS beneficiary	
	FY 1992-1997	FY 1997-1999
Inpatient hospital	5.8	-0.5
Home health (combined Parts A and B)	21.9	-26.9
Skilled nursing facility	30.9	0.4
Physician fee schedule	4.8	3.7
Outpatient hospital	6.7	-5.1
Medicare+Choice (per M+C beneficiary)	7.9	6.5
Total Medicare (per beneficiary)	8.0	-0.7

Note: FFS (fee-for-service), FY (fiscal year).

Source: Office of the Actuary, HCFA.

Advocates have cited the lower-than-expected spending, reduced numbers of certain Medicare providers (such as managed care plans and home health agencies), poor provider financial performance, and, in turn, compromised access to care as evidence that the effects of BBA were excessive and, in some cases, beyond the intent of the legislation.

Although passage of the BBRA is expected to address some of these concerns, it is important to understand the causes behind the lower-than-expected spending, which reflect not only the inherent uncertainty of projections, but also the unanticipated improved compliance with payment rules and delays in claims processing. In addition, understanding the role of health care market dynamics helps inform policymakers of the relationships between reduced spending levels and provider participation in Medicare, and as well as providers' overall financial performance.

**Improved compliance with payment rules**

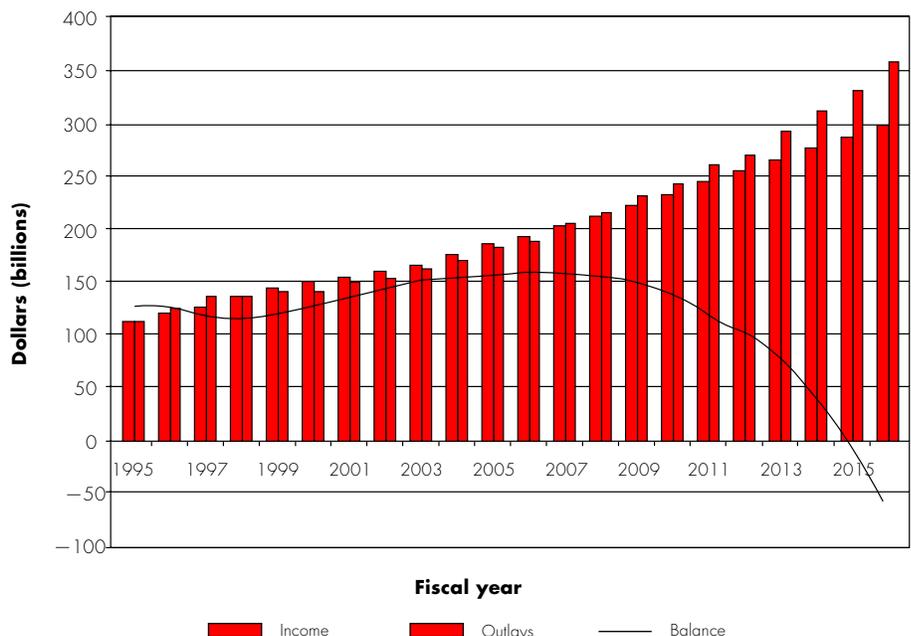
Rigorous enforcement of existing payment rules, in combination with fraud and abuse provisions enacted in the 1996 Health Insurance Portability and Accountability Act (HIPAA), appear to have led some providers to be far more careful in their coding practices. HIPAA provisions required stricter screening of

claims by Medicare contractors and tougher enforcement of Medicare laws by the departments of Justice and of Health and Human Services. Through

investigations and lawsuits, the departments have pursued a range of providers—including hospitals, physicians, home health agencies, clinical

**FIGURE  
1-3**

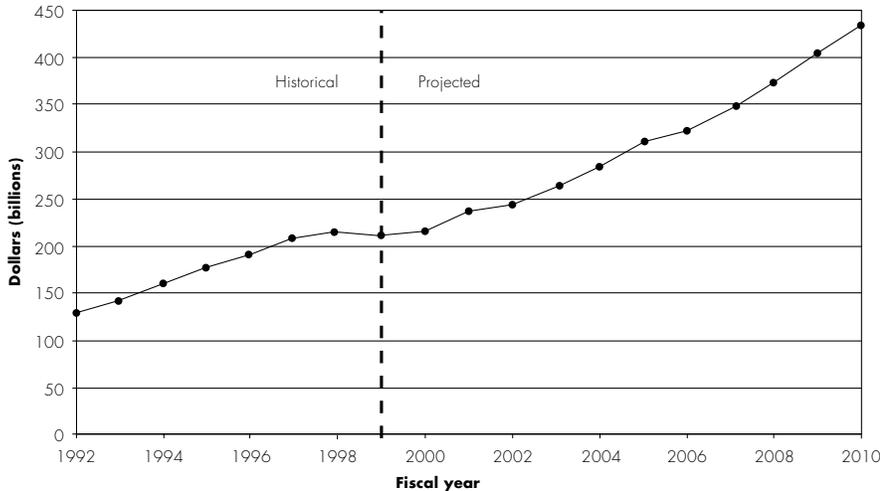
**Hospital Insurance Trust Fund: 1999 projections**



Source: 1999 Federal Hospital Insurance Trust Fund report.

**FIGURE 1-4**

## Aggregate Medicare spending, fiscal years 1992–2010



Note: Includes both fee-for-service and Medicare+Choice spending.

Source: Projections from the CBO January 2000 baseline; historic data from the economic and budget outlook: fiscal years 2000–2009, January 1999, CBO.

insurers' behavior, Medicaid policy, demographics, and local practice patterns.

A recent study exploring managed care growth in four markets suggested that factors such as prior managed care history, beneficiary characteristics, supplemental coverage patterns, and the form of provider organization strongly affect differences in managed care growth across the country (Brown and Gold 1999). In addition, the pattern of managed care plan withdrawals from Medicare suggests that in some markets, providers have regained leverage and do not find it in their interests to contract with managed care plans. As a result, some plans do not have sufficient networks to participate in the Medicare program, which means that some plans' decisions not to participate in Medicare are driven by factors independent of Medicare payment policy. Finally, managed care plans have not entered into rural areas, despite dramatic increases in Medicare payment rates.<sup>5</sup> In some cases, this reluctance is due partly to business decisions that reflect plans' inability to negotiate with providers and insufficient numbers of enrollees over which to spread insurance risk.

In the traditional Medicare program, providers' performances and business decisions also have been influenced by factors external to Medicare. The continued growth of managed care and preferred provider organizations in the commercial market has increased pressure on providers to accept discounted payments. In FY 1997, private payers' payments to hospitals dropped by 4 percentage points, relative to the cost of treating patients. Data for FY 1998 are not yet available, but there is every reason to believe that the downward pressure from private payers has continued as Medicare has reduced its payments. Physicians have also experienced revenue constraints. Growth in average annual net income fell from 7.2 percent for 1986–1992 to 1.7 percent for 1993–1996, partly as more physicians opted for employment with large group practices well equipped to

laboratories, and durable medical equipment suppliers—as well as Medicare contractors themselves.

Part of the response to fraud and abuse policies has been less aggressive billing by health care providers. Recent testimony by CBO provided an example of the changes in hospital billing patterns and their impact (Crippen 1999).<sup>4</sup> The agency noted that patients with respiratory infections are usually assigned to one of two DRGs: respiratory infections—for which Medicare payments averaged \$7,400 in 1998—or simple pneumonia, for which payments averaged \$4,900. From 1997 to 1998, the number of cases in the higher-paying DRG fell by 43,000, while the number of cases assigned to the lower-paying DRG increased by 42,000. According to CBO, that single change in coding reduced Medicare program spending by about \$100 million in 1998.

### Claims processing delays

CBO also attributes some of the spending slowdown to delays in processing Medicare claims, which appear to be due to improved compliance efforts and efforts to prepare computer systems for the year 2000. As CBO notes, increasing processing time by one week reduces Medicare outlays for a fiscal year by about 2 percent. The reduction is only temporary, of course, because the delay moves outlays into the next fiscal year.

### Health care market dynamics

Although Medicare is the single largest payer in the market (accounting for 20 percent of spending) and its beneficiaries the largest group of health care consumers, its policies do not operate in a vacuum. Providers' choices and performance are also influenced by market factors, such as commercial

4 The CBO did not analyze the clinical appropriateness of these coding changes. See further discussion on coding patterns for physician services in Chapter 3.

5 See Chapter 5 for further discussion.

contract with managed care plans (Levit et al. 1998).

In considering providers' financial performances, it is also important to consider Medicare's influence relative to that of private insurance. For many providers, Medicare is the "800-pound gorilla" in the market, significantly outweighing commercial payers. For others, however, Medicare payments may be a much smaller factor.

On average, Medicare payments accounted for about 21 percent of total expenditures for physician services in 1997. Among physicians, however, certain specialists—such as geriatricians and ophthalmologists—rely more heavily on Medicare beneficiaries. Medicare

payments accounted for about one-third of total hospital spending, but this figure varies depending on location, specialty, and market niche. Medicare's market share for post-acute care services varies by site. For example, in 1997, Medicare accounted for 40 percent of home health services but only 12 percent of spending on nursing home care (Long 1999).

### **Access to quality care**

Ultimately, the Commission is most concerned about how BBA and other policy changes affect beneficiaries' access to quality care. Are providers willing to care for beneficiaries? Are beneficiaries receiving appropriate care? Is the health care infrastructure sufficient to meet the needs of Medicare beneficiaries? To determine whether access to care has been

compromised, MedPAC has examined the results of numerous studies on providers' willingness to care for beneficiaries. Using results from the 1998 Medicare Current Beneficiary Survey, MedPAC has analyzed beneficiary access and satisfaction data. The Commission has found no increase in systemic access problems, but is concerned that previous barriers for vulnerable populations persist. In addition, the Commission is concerned that some studies suggest access to certain services has been adversely affected by BBA policies and that other BBA policies have not yet been implemented. Accordingly, it believes that continued monitoring of access to care is necessary. Chapter 2 examines these access to care issues in greater detail. ■

## References

---

Board of trustees, Federal Hospital Insurance Trust Fund. Annual report. Washington (DC), FHITF. March 1999.

Board of trustees, Federal Hospital Insurance Trust Fund. Annual report. Washington (DC), FHITF. March 1997.

Brown RS, Gold MR. What drives Medicare managed care growth? Health Affairs. November/December 1999, Vol. 18, No. 6, p. 140–149.

Committee on Ways and Means, U.S. House of Representatives. Summary of the Medicare, Medicaid, and SCHIP Balanced Budget Refinement Act of 1999 (H.R. 3426), Committee on Ways and Means. May 14, 1999, available at [http://www.house.gov/ways\\_means/bbacrssu.pdf](http://www.house.gov/ways_means/bbacrssu.pdf).

Committee on Ways and Means, U.S. House of Representatives. Medicare and health care chartbook. Washington (DC), Committee on Ways and Means. February 27, 1997.

Crippen D, Congressional Budget Office. The impact of the Balanced Budget Act on the Medicare fee-for-service program. Oral testimony before the Committee on Commerce, U.S. House of Representatives. September 15, 1999.

Grob GF, Office of the Inspector General, Department of Health and Human Services. Oral testimony before the Health Subcommittee, Committee on Ways and Means, U.S. House of Representatives. March 4, 1997.

Levit K. National health expenditures in 1997: more slow growth, Health Affairs. November/December 1998, Vol. 17, No. 6, p. 103–104.

Long A, Health Care Financing Administration. Fax to Anne Mutti, MedPAC. Washington (DC). December 14, 1999.

Prospective Payment Assessment Commission. Report to the Congress: Medicare and the American health care system. Washington (DC), ProPAC. June 1997.

Riley G, Tudor C, Chiang YP, et al. Health status of Medicare enrollees in HMOs and fee-for-service in 1994, Health Care Financing Review. Summer 1996, Vol.17, No. 4, p. 65–76.

CHAPTER 2

---

**Medicare beneficiaries' access to  
quality health care**

---

## R E C O M M E N D A T I O N

**2A** The Secretary should periodically identify potential problems in beneficiaries' access to care that arise in the evolving Medicare program and should report annually to the Congress on findings from studies undertaken to examine those potential problems.

# Medicare beneficiaries' access to quality health care

C H A P T E R

# 2

**T**he Balanced Budget Act of 1997 changed Medicare payment policies in ways that could affect beneficiaries' access to quality care. Although the Congress increased some payments to providers and lessened their regulatory burden in the Balanced Budget Refinement Act of 1999, whether these steps were needed to ensure continued access is still unclear. Recent studies of access to physician services and post-acute care have generally concluded that Medicare policy changes have not caused access problems for most beneficiaries, and MedPAC's routine monitoring analyses have showed no increase in access problems in the first year following Balanced Budget Act enactment, although certain groups of beneficiaries continue to experience considerably higher rates of problems than do others. Some studies have uncovered new problems, however, that warrant attention. For example, beneficiaries who need medically complex care may face increased difficulty obtaining skilled nursing facility admissions; whether those admitted are now less likely to receive appropriate care is as yet unknown. An increase in the share of beneficiaries who lack supplemental insurance coverage is also a concern, given the importance of this coverage in promoting access to care. MedPAC's analysis of trends in beneficiaries' financial liability for health care and the implications of the Balanced Budget Act does not lead us to expect significant increases in out-of-pocket spending, but does suggest that the liability gap between managed care and traditional program enrollees is likely to shrink. Because continued vigilance is needed as the Act's implementation progresses, the Commission will make access monitoring a continued priority and calls upon the Secretary of Health Human Services to do likewise.

## In this chapter

- Beneficiary characteristics associated with access and satisfaction
- Access to care in the traditional Medicare program
- Access to care in the Medicare+Choice program
- Medigap insurance and access to care
- Trends in beneficiaries' financial liability over time
- Need for continued monitoring of beneficiary access to quality health care

The Balanced Budget Act of 1997 (BBA) made a number of important changes in Medicare policies, some of which could affect beneficiaries' access to care or the quality of care they obtain. Certain reductions in payment levels mandated by the BBA could decrease the willingness or ability of providers to serve beneficiaries, or cause providers to reduce the value of the services they furnish. In addition, some changes in Medicare's provider payment methods mandated in the BBA—notably, shifts to prospective payment systems for certain providers previously reimbursed on a cost basis—could change the availability of certain services by altering incentives for providing them. Significant changes in payments to Medicare+Choice (M+C) plans could affect access to services for enrollees, as well as reduce the extent to which plans offer enriched benefit packages and lower out-of-pocket spending for their enrollees. Other BBA changes could affect some beneficiaries' access to care by affecting the amount of out-of-pocket payments for which they are financially liable.

Assessing the effects of BBA policy changes on beneficiaries' care is challenging in several respects. First, not all changes have yet been fully carried out, and some were rescinded or modified by the Balanced Budget Refinement Act of 1999 (BBRA). In addition, few data are yet available by which to assess changes that have been implemented. Finally, it is difficult to isolate the effects of BBA policy changes from the effects of ongoing changes in the health care delivery system. Despite these limitations, the Medicare Payment Advisory Commission (MedPAC) and others have taken steps to evaluate the extent to which beneficiaries' access to care has changed since new Medicare payment policies took effect and the degree to which the new policies have caused those changes.

MedPAC concludes that as yet, there is little reason to believe that Medicare policy changes enacted by the BBA have posed a significant threat to beneficiaries' access to care, although certain findings warrant additional attention. For example,

MedPAC's study of access to physician services found no indication that cuts in physician payment levels changed the willingness or ability of physicians to continue serving Medicare beneficiaries. The Commission's study of beneficiary access to home health care under the interim payment system uncovered evidence of potential problems, although the effects of the new payment system were confounded by other factors. Studies of access to skilled nursing facility (SNF) care have found that some medically complex patients may have increased difficulty obtaining admissions under the new payment system, although no studies have addressed whether the care received by SNF patients has changed.

MedPAC's routine monitoring efforts also do not show increasing access problems for beneficiaries. Findings from an analysis of beneficiary survey data show no changes in access for traditional program and M+C enrollees between 1997 and 1998, although higher rates of problems persist among certain vulnerable populations. Furthermore, an increase in the share of beneficiaries lacking supplemental insurance coverage deserves further study. Data are not yet available to assess beneficiary financial liability—an important determinant of access—in the post-BBA world. MedPAC's analyses of trends in pre-BBA data and of the likely impact of BBA changes do not provide cause for concern in the near future for traditional program beneficiaries, but BBA provisions could lead to increases in financial liability for M+C enrollees.

Although the BBRA reduced the likelihood of certain access problems developing as a result of BBA provisions, continued vigilance is needed to ensure that beneficiary care is not compromised by forthcoming Medicare policy changes. MedPAC will continue to monitor and report on beneficiary access as further changes are instituted and additional data become available. As required by the BBRA, the Commission's future work will address access to quality health care for beneficiaries who live in rural areas. MedPAC will also examine the effects on

beneficiary care of shifting to prospective payment for post-acute care, drawing on the work of sponsored research to develop indicators of beneficiaries' use of needed services. Furthermore, MedPAC urges the Secretary to renew her focus on issues of beneficiary access to quality care. The Commission recommends that she periodically identify key access issues that arise in the evolving Medicare program and that she report annually to the Congress on findings from studies undertaken to address those issues.

This chapter begins with an overview of characteristics of the beneficiary population associated with greater likelihood of access problems and an analysis of these characteristics among beneficiaries in the traditional Medicare program and M+C enrollees. Next, it describes key BBA modifications to provider payment methods and amounts that could affect access to care for beneficiaries enrolled in the traditional program, and examines evidence on changes in beneficiary access to care since Medicare policy changes took effect. It then assesses how recent changes in Medicare managed care could affect enrollees and examines how changes have affected coverage or access to services. Following a brief review of current issues relating to Medigap coverage, the chapter continues with an analysis of beneficiaries' out-of-pocket spending for health care that assesses how spending has changed, factors influencing future changes, and resulting implications for access. The chapter concludes with a discussion of the need for future access monitoring and MedPAC's recommendation to the Secretary aimed at meeting this need.

---

## **Beneficiary characteristics associated with access and satisfaction**

---

Medicare researchers have found that certain beneficiary characteristics or circumstances are associated with a greater likelihood of experiencing problems in obtaining needed health care

on a timely basis. Efforts to monitor Medicare beneficiary access have often included assessments of the extent to which these vulnerable groups experience problems, compared with others.

The groups of beneficiaries who have been found to be vulnerable to access problems differ somewhat between the traditional program and the managed care option. Vulnerability to access problems in the traditional program appears related to minority status, relative need for care, and ability to pay for care. For example, analyses of the annual Medicare Current Beneficiary Survey (MCBS) have consistently shown that traditional program beneficiaries who are African American, Hispanic, functionally disabled, in poor health, poor, or lacking supplemental insurance coverage are more likely than other beneficiaries to report problems obtaining care (MedPAC 1998).<sup>1</sup> In contrast, Medicare managed care enrollees' access to services has been found to vary based on health, functional, or disability status, rather than on race, ethnicity, or income. For instance, a 1996 study of Medicare managed care enrollees' access found that those who were disabled and younger than 65, older than 85, functionally impaired, in fair or poor health, or in worsening health were more likely than other enrollees to report access problems (Nelson et al. 1997). However, additional analysis revealed that, with the notable exception of the nonelderly disabled population, greater need for care explained much of the difference in rates of reported access problems.<sup>2</sup>

Beneficiaries not enrolled in managed care who lack any form of public or private supplemental coverage are a vulnerable group of particular policy interest because the share of beneficiaries in this group has increased significantly in recent years. MedPAC's analyses of data

from the MCBS show that the proportion of noninstitutionalized beneficiaries in the traditional Medicare program lacking any supplemental coverage has increased from 12.2 percent in 1996 to 13.6 percent in 1997 and 14.4 percent in 1998. This reflects a decline in employer-sponsored coverage and Medigap coverage over this period. The percentage of beneficiaries covered by Medicaid remained stable.

The issue of the vulnerability of rural beneficiaries to access problems is a complicated one; MedPAC will focus on this issue in our work over the next 18 months. The notion of rural beneficiary vulnerability stems from concerns about the adequacy and fragility of health care delivery systems in sparsely populated areas. However, evidence on the extent to which Medicare beneficiaries who live in rural areas experience more access problems than others is mixed (MedPAC 1998). For example, analyses of Medicare claims conducted by the Physician Payment Review Commission (PPRC) showed that beneficiaries residing in rural areas were more likely than others to be admitted to the hospital for conditions that could be averted by proper use of ambulatory care, but less likely to be admitted to the hospital through the emergency room (PPRC 1995). The nature and extent of access problems may differ for different types of rural areas; in addition, the issue of rural beneficiaries' vulnerability is complicated by the fact that Medicare includes numerous special payment policies designed to promote access to care for rural beneficiaries. It is likely that more problems with beneficiary access would be evident in the absence of those policies, although their cumulative effects have not been studied.

An analysis of data from the 1998 MCBS shows the proportion of beneficiaries living in a community setting who have characteristics or circumstances that

place them at greater risk of experiencing access problems (Table 2-1). Compared with traditional program enrollees, fewer M+C enrollees were in many of the groups viewed as potentially vulnerable to access problems in 1998. Two groups show the largest disparities between M+C and the traditional program: residents of rural areas and beneficiaries eligible for Medicare on the basis of a disability. Because few M+C plans are available in rural areas, only 5.7 percent of M+C enrollees were rural residents, compared with 28.8 percent of traditional program enrollees.<sup>3</sup> Only 6.7 percent of M+C enrollees were disabled and younger than 65, compared with 13.6 percent of beneficiaries enrolled in the traditional program. Health and functional status differences between the two populations are also notable; 21.4 percent of M+C enrollees and 28.6 percent of traditional program enrollees reported fair or poor health, and 10.9 percent of M+C enrollees and 13.9 percent of traditional program enrollees reported needing help with activities of daily living.

---

## Access to care in the traditional Medicare program

---

Since the BBA's enactment, policymakers and others have raised questions about the extent to which payment changes in Medicare have affected the care received by beneficiaries who obtain care through the traditional program. Changes in Medicare payment levels or methods could reduce providers' willingness to serve beneficiaries or their ability to make certain services available. Such changes could also provide incentives to reduce the intensity or duration of care. A number of studies have assessed whether beneficiary care

---

1 Regression analyses showed that poor health status (self-reported) and a lack of supplemental insurance coverage were more predictive of access problems than were other factors (PPRC 1997).

2 The researchers controlled for differences between vulnerable groups and other enrollees in relative need for care by computing the percentage of beneficiaries who reported access problems among those defined as having a need for particular services. Enrollees were considered to be in need of a service if they reported either having received a service or not receiving it when they believed it to be necessary.

3 See Chapter 5 for a discussion of Medicare+Choice plan availability in rural areas.

---

**TABLE  
2-1**

**Selected characteristics of noninstitutionalized traditional Medicare and Medicare+Choice enrollees, 1998**

Characteristics	All	Traditional Medicare	Medicare+Choice
Race			
African American	9.4%	9.3%	10.0%
White	88.9	89.0	88.1
Other	1.8	1.7	2.0
Ethnicity			
Hispanic	6.8	6.4	8.2
Other	93.3	93.6	91.8
Age			
85+	9.2	9.4	8.6
Under 85	90.8	90.6	91.4
Self-reported health status			
Excellent	14.9	14.2	18.0*
Very good or good	57.9	57.3	60.6
Fair or poor	27.3	28.6	21.4
Help with functional impairment			
Needed	13.3	13.9	10.9*
Not needed	86.7	86.1	89.1
Medicare eligibility status			
Disabled	12.3	13.6	6.7*
Aged	87.7	86.4	93.3
Annual income			
Up to \$10,000	25.9	26.9	21.3*
More than \$10,000	74.1	73.1	78.7
Place of residence			
Rural	24.7	28.8	5.7*
Urban	75.4	71.2	94.3
Supplemental Insurance			
Private	63.6	73.6	—
Medicaid	10.4	12.0	—
Medicare only	26.1	14.4	—

Note: \* Difference between traditional Medicare and Medicare+Choice enrollees in their distribution across categories is statistically significant at a 0.05 level. Percentages do not always total 100 due to rounding.

Source: MedPAC analysis of data from the 1998 Medicare Current Beneficiary Survey Access to Care file.

has changed as a result of BBA payment changes; most have found little discernible, negative impact on beneficiary access to or quality of care. Further study of some potential problems in post-acute care is required, however, and additional studies will be needed to assess policies not yet phased in.

**Providers' willingness and ability to serve Medicare beneficiaries**

Health care providers may become less willing or able to serve Medicare beneficiaries if the payments they receive from the program are not adequate to cover their costs. Because provisions of the BBA changed many of Medicare's payment levels and methods, it is important to monitor providers' responses to those changes to ensure that beneficiaries continue to have adequate access to quality medical care. This section identifies key BBA payment policy changes relating to ambulatory care, hospital care, and post-acute care, and reviews evidence on the extent to which these changes have affected providers' willingness or ability to serve beneficiaries.

**Beneficiary access to ambulatory care**

Although the BBA made a number of important changes in payments to hospital outpatient departments (OPDs) and physicians that stand to affect Medicare beneficiaries' access to those services, problems are not yet evident. Because MedPAC is concerned about the magnitude of changes in payments to OPDs, the Commission reiterates its advice to the Secretary of Health and Human Services to monitor beneficiary access to these services as new payment methods are instituted. Although the Commission's own study of physician attitudes and perceptions did not provide an immediate cause for concern about beneficiary access to physician services, MedPAC will continue to track ongoing changes in physician payment policies and their effects on beneficiary care.

**Changes in payments to outpatient departments** Although the BBA made significant changes in payments to hospital outpatient departments, the key change has yet to occur. The BBA eliminated the so-called formula-driven overpayment, under which Medicare's payments did not correctly account for beneficiaries' cost-sharing, and extended the reduction in payments for services paid on a cost-related basis. That change, which took effect in 1998, reduced payments to hospitals by about 9 percent (MedPAC 1999b). The law also directed the Secretary to establish a prospective payment system (PPS) for services paid at least partially on the basis of incurred costs. The PPS originally was to have gone into effect in January 1999, but now will not be initiated before July 2000. In accordance with provisions in the BBRA, the PPS will be phased in over a transition period—ending, for most hospitals, in 2003—and spending will increase from BBA levels.

Although MedPAC supports the OPD payment reforms made in the BBA, the Commission has also acknowledged that the magnitude of the payment reductions and certain design features of the forthcoming payment system could have negative implications for Medicare beneficiaries' ability to obtain needed ambulatory care (MedPAC 1999b). Therefore, the Commission previously recommended that the Secretary closely monitor hospital outpatient service use following the move to the PPS to ensure that access to appropriate care is not compromised.

**Effects of changes in payments to physicians** In contrast to changes in OPD payments, many of the most important changes in payments to physicians took effect immediately following the BBA. Their effects were not unidirectional; the effects on beneficiary access might therefore be mixed. The Commission has not, to date, found evidence that beneficiary access to physician services is decreasing. Findings from a MedPAC-sponsored survey of

physicians, conducted after key BBA changes, do not raise concerns about physicians' willingness or ability to care for Medicare beneficiaries in the short term. However, the Commission will continue to look for changes in access as additional BBA changes occur.

The BBA made significant changes in physician payments. The law replaced the volume performance standard system used to update physicians' fees with the sustainable growth rate (SGR) system. The SGR replaced the three conversion factors used for surgical services, primary care, and other nonsurgical services with a single factor that reduced payments for some services and increased them for others. The BBA also required a phase-in of a new method for calculating payments to physicians for their practice costs.

Several important changes to Medicare's payments to physicians occurred almost immediately after BBA enactment. The single conversion factor was implemented January 1, 1998, along with changes in practice expense payments for certain services. The Health Care Financing Administration (HCFA) also increased the relative value units for physician work associated with certain surgical services in 1998, to be consistent with previous changes in payments for evaluation and management services. The net effects of these changes were largest for some surgical procedures, such as cataract surgery and some orthopedic procedures, where payment rates fell by 13 percent or more (MedPAC 1998). However, payments for office visits and some diagnostic services increased by at least 7 percent.

To assess whether and how physicians responded to the 1998 changes in Medicare's payments to physicians, MedPAC contracted with Project HOPE and the Gallup Organization to conduct a mail and telephone survey of physicians (Schoenman and Cheng 1999). A total of 1,298 physicians were interviewed between December 1998 and March 1999.

The survey provided information comparable to that obtained through a 1994 survey of physicians conducted by PPRC, allowing for assessment of changes over time in physician satisfaction with various components of practice and reimbursement levels. For certain survey questions, physicians were also asked to report the extent to which their practices had changed in the past year.

Survey findings show that, at least in the short term, physicians are still willing and able to care for Medicare beneficiaries:

- Among physicians accepting all or some new patients, more than 95 percent said they were accepting new Medicare fee-for-service (FFS) patients in 1997 (before the Medicare payment policy changes took place) and in early 1999. Consistent with findings from the 1994 PPRC survey, physician acceptance of new Medicare patients was comparable to their acceptance of new privately insured FFS patients.
- Only about 10 percent of physicians reported any change since 1997 in the priority given to Medicare patients seeking an appointment. Of those changing their appointment priorities, the percentage that reported giving Medicare patients a higher priority was almost the same as the percentage that assigned Medicare patients a lower priority.
- Only 4 percent of physicians said it was very difficult to find suitable referrals for their FFS Medicare patients, a finding comparable to the percentage reporting problems in referring their privately insured FFS patients.

Many surveyed physicians expressed concerns about payment levels. About 45 percent said that reimbursement levels for Medicare FFS patients are a very serious problem, compared with 25 percent for private FFS patients.<sup>4</sup> A higher percentage

4 Surgeons were significantly more likely than other physicians to say that fee-for-service Medicare reimbursement levels represented a very serious problem.

of physicians—59 percent—reported that reimbursement levels for FFS Medicaid patients are a very serious problem. Physicians expressed the highest level of concern with the reimbursement levels of health maintenance organizations (HMOs) and other capitated plans: About 66 percent of physicians surveyed said that the reimbursement levels of HMOs are a very serious problem.

Although the immediate impact of BBA changes to physicians appears not to have threatened beneficiary access to care, other BBA-required changes to physician payments that could affect access did not take effect immediately. Of particular interest is the effect of practice expense changes, which will not be completely implemented until 2002 and which may cause significant cuts in payments for certain services. Other effects related to implementation of the SGR are also possible, prompting the Commission to recommend an additional allowance in the SGR for cost increases associated with improvements in medical capabilities and advancements in scientific technologies (MedPAC 1999b).

### **Beneficiary access to hospital care**

Because hospital care is often the consequence of an event beyond the control of an individual or a hospital, access to hospital care is first and foremost measured by the effect of payment provisions on hospitals' abilities to remain open and operational.

With the passage of the BBA, the Congress made several changes in hospital payments that have the potential to affect beneficiary access or reduce the quality of hospital care. These provisions included: no updates to inpatient operating payments for hospitals under the Medicare PPSs in fiscal year (FY) 1998 and limited updates from 1999 to 2002; phased reductions in the per-case adjustments for the indirect costs of medical education (IME); temporary reductions for hospitals serving a disproportionate share (DSH) of

low-income patients; and a new transfer policy for 10 high-volume diagnosis related groups (DRGs) that reduces payment rates when hospitals discharge patients in these DRGs to post-acute care facilities following unusually short stays. By themselves, lower updates would have slowed the growth in payment rates but would not have reduced them. However, in FY 1998, the combined effect of the freeze on payment rates and smaller IME and DSH payment adjustments reduced payment rates in absolute terms. Payment rates began to increase again in FY 1999, but slower than they would have in the absence of the BBA.

It is important to consider these payment policy changes in the context of the trend in aggregate Medicare payments to hospitals for inpatient services covered by prospective payment. At the time Congress enacted the BBA, average Medicare inpatient margins had risen from -2 percent to 17 percent over six years. In recommending the freeze on inpatient payments in FY 1998 and supporting the expanded transfer policy, the Prospective Payment Assessment Commission (ProPAC) believed that payments could be modestly reduced, and thereby brought into closer alignment with the costs of care, without compromising quality or access to care (ProPAC 1997).

These provisions, along with the cumulative impact of similar reductions in post-acute care, have raised concerns about the viability of certain hospitals—particularly low-volume hospitals, and especially low-volume hospitals in rural areas. Concerns have been raised over the impact of these provisions on access to care (in both rural and urban settings), but there are insufficient data to draw definitive conclusions. Despite the lack of data, the BBRA contained a number of provisions targeted to rural hospitals, including provisions to strengthen the Critical Access Hospital program (an extension of the Medicare-dependent hospital program) and increased flexibility

to provide graduate physician training in rural areas.

The BBRA requires MedPAC to initiate a series of studies that will attempt to answer many of the questions surrounding access to hospital care for Medicare beneficiaries who reside in rural areas. The most significant is an assessment of special payment provisions for rural hospitals and their impacts on access and quality.<sup>5</sup> These studies will enable MedPAC to analyze the impact of the BBA on rural providers and whether and how access to and quality of care have been affected.

### **Beneficiary access to post-acute care**

Systems for paying post-acute care providers—including skilled nursing facilities, home health agencies, long-term hospitals, and rehabilitation facilities—currently are undergoing changes that alter the method and level at which providers are reimbursed. These changes, which generally move reimbursement from cost-based systems to PPSs, may potentially affect providers' ability and willingness to furnish care. Payment systems in the post-acute care arena are at different stages of development or implementation. These changes, occurring over a relatively short period of time, create uncertainty as to whether access to care will be adequately maintained. Therefore, the Commission reiterates the need to monitor beneficiaries' access to quality care as these payment systems are developed and implemented (MedPAC 1999b).

The BBA and the BBRA mandated substantial changes in Medicare payment policy for providers of post-acute care. The BBA required the Secretary to implement a new PPS for rehabilitation facilities and develop a payment proposal for long-term hospitals. The BBRA refined these mandates by requiring the Secretary to implement a discharge-based PPS for rehabilitation facilities and to

5 Other MedPAC reports on rural health mandated in the BBRA include: an evaluation of the impact of the PPS for psychiatric hospitals on access to such services at rural hospitals; a study on the appropriateness of applying the outpatient PPS to certain rural and cancer hospitals; and a study to determine the feasibility and advisability of exempting home health services provided by rural home health agencies from the PPS.

classify patient discharges according to functional-related groups. The BBRA also required the Secretary to develop a patient classification system for long-term hospitals in an effort to move toward a discharge-based PPS.

The BBA also made provisions for developing and implementing a new PPS in the home health care arena. Until HCFA institutes that system on October 1, 2000, Medicare makes payments to home health agencies using an interim payment system (IPS), which limits agencies' cost-based payments. The IPS created controls on agency spending for home health services. However, it also raised concerns about whether agencies could meet the cost of providing services to beneficiaries with extensive needs. Because these beneficiaries require more intensive services, and because the IPS does not adjust payments to account for these costs, providers might fail to provide or prematurely end visits for these patients.

The BBA also changed the payment system for SNFs to a PPS. Under the PPS, Medicare pays facilities a single case-mix adjusted per diem rate for each resident. This rate covers all routine, ancillary, capital-related costs and the cost of Part B services provided during a beneficiary's Part A stay. HCFA began to phase in the PPS for SNFs on or after July 1, 1998, according to their cost reporting periods. The PPS is now in place for all facilities; however, the federal rates are still being phased in.<sup>6</sup> The BBRA adjusted payment rates under the PPS by increasing federal per diem payments by 20 percent for some categories of patients (those believed to have higher non-therapy ancillary costs). Additionally, the BBRA raised federal rates for all categories of patients by 4 percent in FY 2001 and 2002.

Although the PPS is intended to reflect efficient treatment costs associated with the full range of SNF patient types, several studies have found that payments were too high for patients who use relatively few non-therapy ancillary services and too low for those who need

relatively high levels of these services (Abt Associates 1998; AHCA 1999; NSCA and AHCA 1999). Inadequate payment rates could potentially result in SNFs denying admission to beneficiaries with medically complex care needs. Although the BBRA made temporary payment increases to the 15 categories of patients considered medically complex, continued monitoring of access for these patients is needed to ensure that the increases are sufficient.

Studies of the impact of payment changes have revealed changes in access to home health care and SNF care for some beneficiaries. Agencies and facilities are asking more detailed questions to assess patients' clinical status and the potential cost of caring for them. Patients requiring the most extensive care face more difficulty in SNF or home health agency placements. However, studies that rely heavily on surveys of hospital discharge planners do not capture the issues facing those beneficiaries who reside in the community and are seeking access to care, nor do they address whether beneficiaries admitted as patients obtain appropriate services of adequate duration and intensity. MedPAC has found that the direct impact of changes in payment systems is difficult to distinguish from other factors that alter the health care delivery environment for Medicare. For example, antifraud initiatives, more stringent review of claims, changes in covered benefits, and market forces may help explain decreases in service use.

**Access to home health care** Since the IPS took effect, the home health care industry has experienced a number of agency closures and agencies have reduced capacities. Researchers have found that these changes have affected certain beneficiaries' access to care, although most beneficiaries are still able to obtain home health care. The General Accounting Office (GAO) found that access generally has not been impaired, despite the closure of approximately 14

percent of home health agencies since 1997 (GAO 1999b). But interviews with key stakeholders in areas with higher frequencies of closures suggest that home health agencies are asking more detailed information about potential patients, and that patients who require costlier services are facing difficulty in finding an agency willing to provide visits.

The Office of the Inspector General (OIG) also studied the effect of the IPS on access to home health care, with results similar to those of the GAO. About 85 percent of hospital discharge planners surveyed reported that beneficiaries were able to receive care when they needed it, but 15 percent state that care was not always available (OIG 1999b). About 60 percent of all discharge planners also believed that the IPS has made the process of placing Medicare beneficiaries with home health agencies more difficult, due to the burden of providing additional information on prospective patients. Patients who face increased difficulty in placement have chronic, intensive, or higher-cost health care needs.

MedPAC sponsored a survey of home health agencies to examine whether access has been compromised by the IPS (MedPAC 1999a). This research reveals that the broad impact of the IPS did not fulfill "the worst predictions," but has likely negatively affected beneficiaries (Abt Associates 1999). Results indicate that the new payment system has led agencies to exercise cost-cutting measures, including refusing services to Medicare patients who have chronic, long-term conditions, especially diabetes. More than half of agencies surveyed expected to exceed their per-beneficiary limit and said that, as a result of the IPS, they would be more likely to decrease their Medicare caseloads, deny admission to certain types of patients, discharge certain types of patients, or reduce clinical staff or hours.

#### **Access to skilled nursing facility care**

Recent studies on access to SNF care suggest that the PPS may have contributed

<sup>6</sup> The BBRA made allowances for facilities to opt either to be paid through a blend of the federal and facility-level rate or to be paid at a fully federal rate for the SNF PPS during the phase-in period of the federal rates.

to access problems for beneficiaries needing the most complex care.

The OIG released the results of two random-sample surveys that found few access problems for Medicare beneficiaries but noted a potential problem in placing beneficiaries requiring extensive services (OIG 1999a, OIG 1999c). One study surveyed hospital discharge planners, the other nursing home administrators and Minimum Data Set (MDS) coordinators. Most MDS coordinators, who are responsible for assessing residents' status and are aware of the admission process, stated that the new reimbursement system did not cause SNFs to refuse patients. Most discharge planners said they did not have difficulty placing patients in nursing homes. However, nursing home administrators, MDS coordinators, and hospital discharge planners reported that nursing homes were changing their admission practices in response to the new PPS—for example, by focusing on whether patients require costly intravenous medications, lab work, or transportation. One-fifth of hospital discharge planners said that as a result, it has become more difficult to place patients requiring extensive services, but easier to place those needing short-term rehabilitation.

The GAO also studied beneficiaries' access to SNF care by surveying 153 discharge planners in 43 states (GAO 1999a). The agency's results generally concur with those of the OIG, finding that beneficiaries' placement in nursing homes has not been affected by the new PPS. However, about two-thirds of surveyed planners reported that SNFs have become more reluctant to admit higher-cost patients, such as those requiring intravenous antibiotics and infusion therapy. Additionally, the GAO study cited a preference by facilities to admit patients needing short-term care. Despite the change of preferences by SNFs, most discharge planners reported that difficult-to-place patients eventually are placed, though they remain hospitalized longer than similar patients did before the PPS.

## Using the Medicare Current Beneficiary Survey to evaluate access

To evaluate access to care from the beneficiary perspective, the Commission analyzed data from the 1997 and 1998 Access to Care files of the Medicare Current Beneficiary Survey (MCBS). Initially fielded in 1991, the MCBS is a longitudinal survey of a nationally representative sample of Medicare beneficiaries administered by the Health Care Financing Administration (HCFA).<sup>7</sup>

Each autumn, HCFA administers the MCBS access to care supplement to noninstitutionalized beneficiaries. The survey includes questions on problems experienced in obtaining care, satisfaction with care, and usual source of care. Since 1996, it has also included questions designed to evaluate Medicare managed care enrollees' access to care and satisfaction with

care. Medicare managed care enrollees, those age 85 and over, and disabled beneficiaries under age 65 are oversampled to permit policy researchers to draw conclusions about how these groups fare compared with their counterparts.

In 1997, 17,078 Medicare beneficiaries were interviewed using the access to care supplement; the 1998 Access to Care file includes data from 19,651 respondents. The increase in sample size reflects an increase in the oversample of Medicare+Choice enrollees in 1998. The sample size increase improved the precision with which access and satisfaction can be analyzed for groups within the population enrolled in Medicare+Choice. ■

<sup>7</sup> For additional information on the Medicare Current Beneficiary Survey and its history, see Adler 1994.

To date, no study has addressed whether beneficiary use of needed SNF care has changed as a result of the PPS. MedPAC recognizes the need to analyze changes in use within a clinical context to evaluate the effects of changes under the PPS, and is funding work to assess the feasibility of developing clinically meaningful indicators of the use of SNF care that reflect standards of appropriate care and can be used with routinely collected administrative data. If such indicators can be developed, the Commission will sponsor their development and use them to analyze the effects of changes in SNF use. Ultimately, this project should allow MedPAC to evaluate whether any changes in beneficiaries' use of SNF care since PPS implementation are clinically problematic.

### Access and satisfaction reported by Medicare beneficiaries enrolled in the traditional program

MedPAC analyses of data from the MCBS reveal that beneficiaries reported no more problems obtaining health care in the first year since BBA enactment than they did in the previous year. Only a small percentage of beneficiaries who obtained care through the traditional program in 1998 experienced problems with access or expressed dissatisfaction with their care, although certain subgroups of the beneficiary population were significantly more likely to do so.

### Traditional program enrollees' access to care

The percentage of beneficiaries in the traditional program reporting problems with access to care did not change

**TABLE  
2-2**

**Access to care for noninstitutionalized beneficiaries in traditional Medicare, by selected beneficiary characteristics, 1998**

Characteristics	Had trouble getting care	Delayed care due to cost	No usual source of care	No office visit this year
All	3.3%	7.6%	10.3%	20.6%
Race				
African American	5.9*	11.2*	17.6*	31.5*
White (R)	2.9	7.0	9.1	18.7
Other	7.1	8.8	13.4	39.1*
Ethnicity				
Hispanic	5.1*	10.3	17.9*	29.8*
Other	3.2	7.4	9.7	19.9
Age				
85+	2.5*	2.6*	7.3*	11.9*
Under 85	3.4	8.1	10.6	21.5
Self-reported health status				
Excellent (R)	1.5	2.9	15.9	29.1
Very good or good	2.1	5.1*	9.2*	18.7*
Fair or poor	6.6*	14.8*	9.6*	20.0*
Help with functional impairment				
Needed	8.0*	13.4*	7.5*	17.4*
Not needed	2.6	6.6	10.7	21.1
Medicare eligibility status				
Disabled	10.2*	21.8*	15.5*	39.0*
Aged	2.3	5.3	9.5	17.7
Annual income				
Up to \$10,000	6.0*	13.2*	15.9*	24.9*
More than \$10,000	2.4	5.6	8.2	18.9
Place of residence				
Rural	3.0	9.2*	10.2	22.4
Urban	3.5	6.9	10.3	19.9
Supplemental Insurance				
Private	2.0*	4.4*	6.9*	16.0*
Medicaid	6.4	10.2*	14.2*	21.4*
None (R)	7.0	21.0	24.2	43.0

Note: \* Difference between subgroups, or between subgroup and reference group (R), is statistically significant at a 0.05 level.

Source: MedPAC analysis of data from the 1998 Medicare Current Beneficiary Survey Access to Care file.

meaningfully from 1997 to 1998. In both years, slightly more than 3 percent of beneficiaries reported trouble getting care, about 8 percent reported delaying care due to its cost, roughly 10 percent reported that they did not have a usual source of

care, and about 20 percent had not had an office visit to a physician that year.

Consistent with findings from previous analyses, in 1998 certain groups of beneficiaries were more likely to report

access problems (Table 2-2). These groups included beneficiaries who were African American, in fair or poor health, eligible because of disability, earned up to \$10,000 per year, or lacked private supplemental insurance coverage.

Beneficiaries needing assistance with activities of daily living (ADLs) because of a functional impairment were more likely to report trouble with getting care and delaying care due to cost, compared with those who did not need assistance. However, they were less likely than other beneficiaries to report that they had no usual source of care or had not had an office visit in the past year.

African-American beneficiaries were more likely than their white counterparts to experience access problems in 1998. Roughly 11 percent of African Americans, and 7 percent of whites, delayed care due to cost. African Americans were twice as likely to report trouble getting care and to have no usual source of care. About 32 percent of African-American beneficiaries had not had a physician's office visit during the year, compared with 19 percent of whites.

Roughly 7 percent of beneficiaries in self-reported fair or poor health—but less than 2 percent of those who reported being in excellent health—said that they had trouble getting care during 1998. About 15 percent of those in fair or poor health—but only about 3 percent of those in excellent health—delayed care due to cost. However, those in excellent health were significantly more likely than those in fair or poor health to have no usual source of care and to have had no office visit in the past year.

Among beneficiaries needing help with ADLs because of a functional impairment, 8 percent had trouble getting care and 13 percent delayed care due to cost. Only 3 percent of those who did not need help experienced trouble getting care, and 7 percent delayed care due to cost. However, the percentage of beneficiaries without a usual source of care was 3 points lower for those needing help, compared with those who did not. The percentage of beneficiaries without an office visit in the past year was about 4 points lower for those who needed help, compared with those who did not.

The percentage of beneficiaries without an office visit in the past year was 21 points higher for disabled-eligible people, compared with age-eligible people. Furthermore, 10 percent of disabled beneficiaries, but only 2 percent of aged beneficiaries, experienced trouble getting care in 1998. More than 20 percent of disabled beneficiaries, but only 5 percent of aged beneficiaries, reported that they had delayed care due to cost. The percentage of beneficiaries without a usual source of care was 6 points higher for disabled-eligible persons, compared with age-eligible persons.

Among beneficiaries with incomes of up to \$10,000 per year, 6 percent reported trouble getting care and 13 percent reported delaying care due to cost. Among beneficiaries earning more than \$10,000 per year, only 2 percent reported trouble getting care and 6 percent reported delaying care due to cost. Furthermore, the percentage of beneficiaries without a usual source of care was 16 percent for those earning up to \$10,000 per year, but only 8 percent for those earning more than \$10,000 per year. About 25 percent of beneficiaries with an annual income up to \$10,000, but only 19 percent of those with an annual income greater than \$10,000, had not had an office visit.

Relatively high levels of access problems among beneficiaries who lack supplemental coverage may be of particular concern, given that Commission analyses show this population is growing as a proportion of noninstitutionalized beneficiaries in the traditional program. In 1998, beneficiaries in the traditional program who lacked supplemental coverage were more than three times as likely as those with private supplemental insurance to report trouble getting care. Beneficiaries without supplemental coverage were nearly five times as likely to have delayed care due to cost, more than three times as likely to lack a usual source of care, and more than two and a half times as likely to have not visited a doctor's office in the past year, compared with those with private supplemental insurance.

## **Traditional program enrollees' satisfaction with care**

There was no meaningful change from 1997 to 1998 in the fraction of beneficiaries enrolled in the traditional program who reported satisfaction with their care. In 1997, about 93 percent of beneficiaries said their physician's examinations were thorough; in 1998, 94 percent did. Roughly 94 percent of beneficiaries had great confidence in their physician in 1997; in 1998, 95 percent did. During 1997 and 1998, about 95 percent of beneficiaries reported satisfaction with the availability of medical care, and roughly 96 percent of beneficiaries reported satisfaction with the overall quality of their care.

Consistent with results from prior Commission analyses, certain groups of beneficiaries were less likely to be satisfied with their care in 1998, although levels of satisfaction were very high even among those groups (Table 2-3). Beneficiaries in fair or poor health and those needing assistance with a functional impairment were less likely to agree that their physician's examinations were thorough, to have great confidence in their physician, or to report satisfaction with the availability and overall quality of medical care, compared with those in better health or those not needing help. Aged beneficiaries and those with either private or Medicaid supplemental insurance were more likely to have great confidence in their physicians and be satisfied with the availability and quality of medical care, compared with disabled beneficiaries and those without supplemental coverage. Hispanic ethnicity, an annual income of up to \$10,000, and urban residence were associated with decreased satisfaction with the quality of care received.

---

## **Access to care in the Medicare+Choice program**

---

Extensive changes in the Medicare managed care program since the Congress enacted the BBA have implications for

**TABLE  
2-3****Satisfaction with care for noninstitutionalized beneficiaries in traditional Medicare, by selected beneficiary characteristics, 1998**

<b>Characteristics</b>	<b>Strongly agree/ agree with "Physician checks everything"</b>	<b>Strongly agree/ agree with "Great confidence in physician"</b>	<b>Very satisfied/ satisfied with availability of medical care</b>	<b>Very satisfied/ satisfied with overall quality of care</b>
All	94.2%	95.3%	95.0%	96.3%
Race				
African American	94.7	94.5	95.9	96.2
White (R)	94.1	95.4	94.9	96.3
Other	92.5	95.2	92.5	93.3
Ethnicity				
Hispanic	97.0*	95.0	95.2	94.2*
Other	94.0	95.3	95.0	96.4
Age				
85+	94.4	95.2	96.1*	96.7
Under 85	94.2	95.3	94.8	96.2
Self-reported health status				
Excellent (R)	95.3	96.6	96.4	97.8
Very good or good	94.7	96.1	96.0	97.1
Fair or poor	92.8*	93.2*	92.8*	93.9*
Help with functional impairment				
Needed	92.3*	93.4*	90.9*	94.0*
Not needed	94.5	95.6	95.7	96.6
Medicare eligibility status				
Disabled	93.1	91.7*	91.4*	92.7*
Aged	94.4	95.9	95.7	96.8
Annual income				
Up to \$10,000	94.6	94.4	94.5	94.5*
More than \$10,000	94.1	95.5	95.2	96.8
Place of residence				
Rural	92.7*	95.5	94.9	97.1*
Urban	94.8	95.2	95.0	95.9
Supplemental Insurance				
Private	94.1	95.8*	95.5*	96.9*
Medicaid	95.3	95.0*	95.1*	95.4
None (R)	93.7	92.2	91.7	93.6

Note: \* Difference between subgroups, or between subgroup and reference group (R), is statistically significant at a 0.05 level.

Source: MedPAC analysis of data from the 1998 Medicare Current Beneficiary Survey Access to Care file.

beneficiaries who lost their health plan coverage and for plan enrollees.

### **Policy changes with implications for Medicare managed care enrollees' access**

The BBA made two types of changes that could affect beneficiaries' abilities to obtain health care through private health plans participating in the Medicare program. First, it took a number of steps that influenced plans' ability to participate in Medicare and that may also have affected their willingness to do so. Second, it contained provisions that could affect access to care for beneficiaries enrolled in health plans that participate in the program.

The BBA created the M+C program, which broadened eligibility for program participation to health plans other than the health maintenance organizations that previously participated in the Medicare risk program. This change had the potential to increase the availability of private health plans to Medicare beneficiaries, creating more alternatives in terms of benefits packages, cost-sharing arrangements, and administrative designs. However, very few of the newly eligible plans have as yet participated, and a considerable number of plans have partially or completely left the M+C program.<sup>8</sup>

BBA changes in plan payment methods and levels may provide plans with incentives to reduce access to services. The BBA established a system for making payments to plans based on a blend of historic county-level spending and national average costs, adjusted for local price levels. As a result of the new system and low levels of spending growth in traditional Medicare, health plan payment growth in the home counties of more than 90 percent of M+C plan enrollees was limited to 2 percent per year in both 1998

and 1999. This could induce participating plans to increase beneficiary cost-sharing, reduce the scope of benefits provided beyond the basic Medicare package, or reduce access to covered services for enrollees. The BBA also required HCFA to implement a system of risk adjustment, which the agency began to phase in January 1, 2000. This system, which is likely to reduce overpayments to M+C plans in the aggregate, has raised concerns among plans about the levels of future payments.

### **Effects of health plan withdrawals on beneficiary coverage and care arrangements**

When health plans stop participating in Medicare or stop serving enrollees in certain geographic areas, beneficiaries experience changes in their coverage and health care arrangements that could affect access to services. Because of recent health plan decisions to stop participating in the M+C program or to withdraw from particular counties, about 405,000 beneficiaries lost their existing health plan coverage in 1998, and another 329,000 did so in 1999. These beneficiaries had to either change health plans or use the traditional program, with or without a supplemental insurance policy. About 50,000 beneficiaries in 1998 and 79,000 beneficiaries in 1999 were left with no other M+C plan available in their area.

The Kaiser Family Foundation sponsored a survey of 1,830 Medicare beneficiaries who lost their private health plan coverage in late 1998 as a result of market withdrawals or service-area reductions (Laschober et al. 1999). The study found that many affected beneficiaries experienced some disruption or decline in coverage. Two-thirds of all the involuntary disenrollees enrolled in another Medicare managed care plan, 15

percent purchased a Medigap policy to supplement traditional Medicare coverage, 8 percent went without supplemental coverage, 4 percent used employer-sponsored coverage, and 1 percent used Medicaid. Most beneficiaries—80 percent—had another risk plan available to them. Of those who did, three-quarters enrolled in one (or in a Medicare cost plan, demonstration plan, or other health plan participating in Medicare).<sup>9</sup> One-third of respondents experienced a decline in benefits, and 39 percent reported higher monthly premiums. One in seven lost prescription drug coverage and about one in five had to switch to a new primary care physician or specialist. Those with traditional Medicare only, Medigap insurance policyholders, the oldest, and the near-poor experienced the greatest hardship after disenrollment.

### **Medicare managed care enrollees' access to care**

The extensive changes in the Medicare managed care program that have occurred since BBA enactment have had some negative implications for beneficiaries. MedPAC's analyses show that health plans have reduced their benefits packages and increased cost-sharing requirements since the M+C program was initiated.<sup>10</sup> These changes stand to affect beneficiaries' satisfaction and access to care. Even with these benefit retractions, however, the least generous M+C plan still provides benefits and cost-sharing that are more favorable, from the beneficiary standpoint, than those provided under traditional Medicare. And although M+C plans also differ from traditional Medicare in that their care management mechanisms allow for greater restrictions on beneficiary access to services, the extent to which plans have changed their use of such restrictions in recent years is unclear.

8 See Chapter 5 for an analysis of Medicare+Choice plan pullouts.

9 Of those who had no risk plan serving their county, 24 percent joined a managed care plan participating in Medicare on a cost basis, a plan participating in a Medicare demonstration, or another type of plan—other than a risk plan—that the beneficiary reported as a health maintenance organization.

10 See Chapter 5 for details of this analysis.

**TABLE  
2-4**

**Access to care for noninstitutionalized beneficiaries enrolled in Medicare+Choice, by selected beneficiary characteristics, 1998**

Characteristics	Had trouble getting care	Delayed care due to cost	No usual source of care	Difficulty getting referrals	Plan ever refused to pay for emergency
All	5.1%	4.5%	5.9%	6.2%	2.0%
Race					
African American	4.3	6.4	9.1*	5.9	2.2
White (R)	5.2	4.5	5.3	6.2	1.9
Other	3.0	2.4	9.5	3.0	0.8
Ethnicity					
Hispanic	6.8	3.8	7.6	9.7	2.7
Other	4.9	4.6	5.7	6.0	1.9
Age					
85+	4.8	3.5	4.6	4.9	1.5
Under 85	5.1	4.6	6.0	6.4	2.0
Self-reported health status					
Excellent (R)	3.6	3.4	8.1	4.4	0.9
Very good or good	3.7	3.5	5.6*	5.3	1.9*
Fair or poor	10.2*	8.3*	4.5*	10.2*	3.2*
Help with functional impairment					
Needed	10.4*	7.7*	5.1	8.0	2.8
Not needed	4.4	4.1	6.0	6.0	1.9
Medicare eligibility status					
Disabled	9.9	14.0*	8.0	10.2	1.5
Aged	4.7	3.8	5.7	6.0	2.0
Annual income					
Up to \$10,000	4.8	6.8*	8.4*	6.0	1.6
More than \$10,000	5.0	3.8	5.0	6.2	2.1
Place of residence					
Rural	3.9	7.0	6.9	8.0	2.0
Urban	5.2	4.4	5.8	6.1	2.0

Note: \* Difference between subgroups, or between subgroup and reference group (R), is statistically significant at a 0.05 level.

Source: MedPAC analysis of 1998 Medicare Current Beneficiary Survey Access to Care file.

MedPAC's analysis of data from the MCBS shows no notable change from 1997 to 1998 in the percentage of managed care enrollees reporting problems with access to care. In both 1997 and 1998, about 5 percent of managed care enrollees reported trouble getting care, roughly 4 percent of managed care enrollees reported delaying care due to cost, and 6 percent of enrollees

reported that they had no usual source of care. The percentage of managed care enrollees reporting difficulty in obtaining referrals to specialists, of those who tried to obtain a referral, was just under 7 percent in 1997 and just over 6 percent in 1998. In 1997, more than 1 percent of enrollees reported that their plan refused to pay for emergency care; 2 percent did so in 1998.

Analysis of selected beneficiary characteristics indicated that certain groups were more likely to have problems obtaining care in the M+C program in 1998 (Table 2-4). Those in fair or poor health reported more problems across most of the access measures evaluated, although they were more likely to have a usual source of care—perhaps because their health

conditions required them to seek care. The percentage of beneficiaries having trouble getting care or delaying care due to cost was about twice as large for functionally impaired individuals, compared with those who were not impaired. Those with annual incomes up to \$10,000 were more likely to delay care due to cost or to have no usual source of care, compared with beneficiaries with annual incomes greater than \$10,000. African Americans were more likely than whites to lack a usual source of care. The percentage of beneficiaries delaying care due to cost was roughly three and a half times greater for disability-eligible, versus age-eligible, beneficiaries.

Enrollees' satisfaction with the care they received was similar for 1997 and 1998. In both years, about 93 percent of enrollees reported that their physicians' examinations were thorough, 94 percent had confidence in their physician, 94 percent were satisfied with the availability of medical care, and 95 percent were satisfied with the overall quality of care they received during the past year. The percentage of enrollees reporting they would recommend their health plan to family and friends was 91 percent in 1997 and 90 percent in 1998.

Certain beneficiary characteristics were associated with lower levels of satisfaction in 1998 (Table 2-5). People in fair or poor health were substantially less likely than those in excellent health to be satisfied with their care by all five measures assessed. Although those 85 years of age or older were less likely to have confidence in their physicians, they were more likely to be satisfied with the availability of care, compared with younger enrollees. Poorer enrollees and those needing help with ADLs because of a functional impairment were less likely to be satisfied with the availability and quality of medical care, compared with those who had higher income or did not need help with ADLs, respectively. African Americans, disabled-eligible enrollees, and urban residents were each less satisfied by one of the five measures, compared with their counterparts.

The reasons enrollees joined managed care plans, rather than remaining in traditional Medicare, were also similar in 1997 and 1998. However, in 1998, cost was less of an incentive and better benefits were more of an incentive, compared with 1997. In 1997, 43 percent of enrollees reported joining their managed care plan because of cost; only 36 percent reported this as a consideration in 1998. Slightly less than 19 percent of beneficiaries reported joining a managed care plan because of better benefits in 1997; this figure was 23 percent in 1998.

The share of Medicare managed care enrollees reporting prescription, optical, preventive, and dental coverage did not change meaningfully from 1997 to 1998. In 1997, about 84 percent of enrollees reported prescription coverage, 81 percent optical coverage, 96 percent preventive coverage, and 53 percent dental coverage. The following year, about 87 percent of enrollees reported prescription coverage, 82 percent optical coverage, 97 percent preventive coverage, and 55 percent dental coverage. The number of beneficiaries reporting coverage for nursing home services was slightly more than 25 percent in 1997 and slightly less than 24 percent in 1998.

## Medigap insurance and access to care

Given the importance of supplemental insurance for beneficiaries' access to care, information on changes to Medigap regulations and trends in the supplemental insurance market are relevant to Medicare policymaking. As noted above, beneficiaries without supplemental insurance are more likely to report problems obtaining access to care, probably because of the financial burdens of cost sharing under Medicare.

The BBA and the BBRA included provisions that could increase access to care by increasing the availability of

Medigap policies. MedPAC reviewed the Medigap provisions of these laws to assess their implications for beneficiary access, compiled information on current Medigap issues, and developed three findings with implications for future work:

- Low use of the Medigap guaranteed issue rights extended by the BBA likely reflects the higher costs and limited benefits provided by the policies, compared with Medicare managed care.
- Limited availability of Medigap policies for certain groups of beneficiaries lacking guaranteed issue rights—including those with end-stage renal disease (ESRD) who are younger than 65, those disabled and younger than 65, and some who voluntarily disenroll from a Medicare+Choice plan—may have implications for these groups' abilities to obtain needed care.
- Rising Medigap premiums, decreased provision of employer-sponsored supplemental insurance coverage, and increasing costs for pharmaceutical drugs are important trends because they tend to affect the desire for Medigap insurance, the ability to purchase it, or both.

## Medigap insurance

Beneficiaries generally obtain supplemental coverage through employer-sponsored retiree health benefits, individually purchased Medigap insurance, or Medicaid. Some beneficiaries hold both employer-sponsored and individually purchased supplemental coverage. Analysis of the 1996 MCBS shows that 25 percent of Medicare beneficiaries had Medigap coverage, 31 percent had employer-sponsored coverage, and 4 percent had both. In general, Medigap policies offer fewer benefits at higher cost than do other forms of supplemental insurance or managed care plans (PPRC 1997).

**TABLE  
2-5**

**Satisfaction with care for noninstitutionalized beneficiaries enrolled in Medicare+Choice, by selected beneficiary characteristics, 1998**

Characteristics	Strongly agree/ agree with "Physician checks everything"	Strongly agree/ agree with "Great confidence in physician"	Very satisfied/ satisfied with availability of medical care	Very satisfied/ satisfied with overall quality of care	Would recommend plan to family/friends
All	93.3%	94.0%	93.8%	95.0%	89.9%
Race					
African American	96.3*	95.2	95.8	96.5	88.2
White (R)	92.9	93.8	93.3	94.8	90.1
Other	94.7	95.9	98.1*	95.9	89.3
Ethnicity					
Hispanic	94.4	94.0	90.0	89.9*	87.0
Other	93.2	94.0	94.1	95.4	90.1
Age					
85+	90.5	90.5*	97.0*	94.9	90.4
Under 85	93.6	94.3	93.5	95.0	89.8
Self-reported health status					
Excellent (R)	93.7	95.7	95.3	97.1	91.2
Very good or good	94.4	94.9	95.6	96.4	92.2
Fair or poor	90.1*	90.1*	88.3*	89.3*	82.4*
Help with functional impairment					
Needed	91.5	93.4	90.5*	91.9*	87.0
Not needed	93.5	94.1	94.2	95.4	90.2
Medicare eligibility status					
Disabled	91.9	93.7	83.8*	92.4	85.3
Aged	93.4	94.0	94.6	95.2	90.2
Annual income					
Up to \$10,000	91.9	92.1*	92.4	93.0*	90.6
More than \$10,000	93.5	94.5	93.8	95.5	89.7
Place of residence					
Rural	90.0	94.1	91.2	97.9*	90.2
Urban	93.5	94.0	93.9	94.8	89.9

Note: \* Difference between subgroups, or between subgroup and reference group (R), is statistically significant at a 0.05 level.

Source: MedPAC analysis of 1998 Medicare Current Beneficiary Survey Access to Care file.

However, decreases in the generosity of benefits offered by M+C plans and employer-sponsored coverage may lead to fewer differences among these sources of supplemental insurance in the future.

**Medigap provisions of the Balanced Budget Act and Balanced Budget Refinement Act**

Both the BBA and the BBRA extended guaranteed issue rights to additional

groups.<sup>11</sup> Under these provisions, insurers who sell Medigap policies must accept all eligible individuals who apply, without regard to health status. By ensuring that beneficiaries can purchase Medigap policies, these provisions should also increase these beneficiaries' access to

11 The BBA also authorized high-deductible options for plans F and J, increased the portability of Medigap insurance in conformance with the Health Insurance Portability and Accountability Act (P.L. 104-191), and prohibited the sale of policies that duplicate Medicare managed care coverage or cover the deductible of a medical savings account.

care. However, the specificity of the guaranteed issue rights still leaves some individuals without guaranteed access to a supplemental policy.

The BBA guaranteed issue of Medigap plans A, B, C, or F, which do not include coverage of prescription drugs, to:

- any enrollee of an M+C plan or other Medicare managed care plan<sup>12</sup> whose plan is terminated, who moves out of the service area, or who terminates enrollment for cause;
- any beneficiary who terminates a Medigap policy to enroll in an M+C plan or other Medicare managed care plan for the first time, and subsequently disenrolls within the first 12 months;<sup>13</sup>
- any beneficiary whose Medigap policy is involuntarily terminated (for example, because of bankruptcy of the issuer) or who terminates a policy for cause;<sup>14</sup> and
- any beneficiary who loses employer-sponsored supplemental coverage.

Beneficiaries who enrolled in an M+C plan when first eligible for the Medicare program at age 65, and who then choose to return to FFS Medicare within the first 12 months of that initial enrollment, may purchase any Medigap plan, including those that cover prescription drugs.

These guaranteed issue rights pertain to beneficiaries ages 65 and older; issue rights for beneficiaries younger than 65 vary by state. Beneficiaries have 63 days from termination to exercise these guaranteed issue rights. During this period, insurers cannot refuse to issue a policy or put conditions on a policy, charge more based on an individual's health status or use of services, or impose a pre-existing condition exclusion.

The BBRA extended guaranteed issue rights parallel to those outlined in the BBA to beneficiaries ages 65 and older in Program of All-Inclusive Care for the Elderly. The legislation also gives beneficiaries whose M+C plans have been terminated the option of exercising their guaranteed issue rights within 63 days of notification of the plan's intent to terminate. They no longer have to wait until the plan has actually terminated, but may do so.

### **Impact of Balanced Budget Act provisions on access to Medigap and remaining access issues**

Limited use of the guaranteed issue rights extended to involuntary disenrollees may reflect the higher costs and limited benefits provided under Medigap compared with Medicare managed care. Recent evidence suggests that among those involuntarily disenrolled from a managed care plan at the end of 1998, only 15 percent purchased Medigap insurance (Laschober et al. 1999). The likelihood of doing so was inversely proportional to the number of alternative managed care plans available; only 2 percent of those with more than five plans available, but 41 percent of those with no plans available, bought a policy. Individuals purchasing Medigap after being disenrolled from Medicare+Choice reported having higher premiums, higher out-of-pocket costs, and fewer benefits than they had previously. Two-thirds stated that they were "more worried now about their ability to pay health care bills."

As benefit packages for M+C plans become less generous the differences in coverage between Medigap and managed care plans may narrow. In addition, Medigap continues to provide supplemental coverage that affords individuals greater access to care than does the Medicare program alone.

The limited availability of Medigap for groups of beneficiaries who lack guaranteed issue rights is likely to influence access for those groups, particularly for those who also lack a managed care option. Voluntary disenrollees from managed care plans make up one such group. In addition to limiting and changing service areas, M+C plans may increase premiums and decrease benefits. If, in response to these changes, beneficiaries voluntarily switch to traditional Medicare, they have guaranteed issue rights only under conditions stipulated in the BBA (for example, disenrolling within 12 months of first-time enrollment in a managed care plan). Individuals with ESRD do not have guaranteed issue rights before their open enrollment period at age 65.<sup>15</sup> Approximately 25 percent of ESRD beneficiaries younger than 65 have no supplemental coverage. Similarly, the nonelderly disabled often lack supplementary insurance. It is estimated that approximately 30 percent of this group has no supplemental coverage.

Three additional trends in the Medigap insurance market may affect beneficiaries' desire for and ability to obtain supplemental coverage, and thus their access to care. Premiums for Medigap policies are increasing. At the same time, a decreasing percentage of employers are providing retirees with supplemental coverage. Finally, while prescription drug costs are increasing faster than costs for other Medicare services, few beneficiaries have Medigap policies that cover drugs, because such policies are either unavailable or expensive.

Premiums are rising and vary markedly across and within markets. Insurance experts estimate that the average premium in 1998–1999 was \$1,500, with annual rate increases of 8–10 percent in 1999–2000 (Weller 1999). In addition, more insurers are selling attained-age

12 Other types of managed care plans include Medicare risk or cost HMO, similar demonstration plans, or a Medicare SELECT policy.

13 These beneficiaries may also return to their previous Medigap policy, which may offer drugs if the policy is still available.

14 Unless otherwise stipulated in state law.

15 See Chapter 6 for a discussion of Medicare's ESRD payment policies.

policies, in which premiums rise as a beneficiary ages. States regulate premium ratings and can allow any of three rating methods: attained-age, issue-age (premium set according to the beneficiary's age when the policy is first issued), or community rating (everyone in a market area is charged the same premium).

Fewer employers are offering retiree health plans, which potentially increases demand for Medigap insurance. In general, beneficiaries with employer-sponsored plans have lower out-of-pocket premium costs than do those in Medigap plans. Analysis of the 1996 MCBS indicates that those with employer-sponsored supplemental insurance paid, on average, \$500 out-of-pocket for premiums (excluding the employer's share) while those with Medigap paid an average of \$1,150. However, recent trends indicate that employers are decreasing retiree health benefits and increasing retiree cost-sharing for those benefits. The percentage of large employers offering supplemental health coverage to retirees 65 and older fell from 40 percent in 1995 to 30 percent in 1998 (EBRI 1999); a further decrease to 28 percent occurred in 1999.

Approximately two-thirds of beneficiaries with Medigap policies do not have drug coverage of any kind (Davis et al. 1999); increasing pharmaceutical costs will affect them disproportionately. Furthermore, most of the guaranteed issue rights included in the BBA (those limited to plans A, B, C, and F) do not include plans with a prescription drug benefit. Employer-sponsored plans, however, are more likely to provide prescription drug coverage. In 1995, only 14 percent of those with employer-sponsored plans had no prescription drug coverage.

## Trends in beneficiaries' financial liability over time

Beneficiaries' out-of-pocket spending on health care (including acute health care services and premiums for Medicare and supplemental coverage) can be a large hurdle to access to care. Traditional Medicare has substantial cost-sharing

requirements on some medical goods and services and provides no coverage for others, most notably prescription medicines and long-term care. The program also lacks catastrophic coverage, leaving some beneficiaries with significant health care needs at risk for considerable out-of-pocket expenses, which can deter them from obtaining needed health care services. Therefore, it is useful to determine the extent to which beneficiaries face a high degree of

### Previous Medigap insurance regulation

Medigap insurance is regulated by both the federal and state governments. Before 1980, there was no regulation of Medigap policies, and many consumers held multiple, often duplicative policies. The "Baucus amendments" (P.L. 96-265) led to prohibitions on selling duplicate policies and provided for voluntary certification standards. To improve the consumer's ability to compare benefits and premiums, the Omnibus Budget Reconciliation Act of 1990 (OBRA-90) (P.L. 101-508) standardized benefit packages to 10 types, labeled A through J. The core benefit package (plan A) covers the coinsurance for Medicare Parts A and B, additional hospital days, and blood products. The remaining packages provide the core benefits plus various combinations of additional benefits. Only three of the policies—H, I, and J—cover prescription drugs. Given the large increment in premiums for Medigap policies with a prescription drug benefit, considerable selection effects are likely to be occurring in these plans. Plan A must be sold in all states; state regulations determine which other plans can be offered by insurers. Three states (Massachusetts, Minnesota, and Wisconsin) have Medigap standards that supercede the OBRA-90 legislation. Policies are guaranteed renewable. Insurers cannot terminate a policy except in certain circumstances, such as nonpayment of premiums. The

OBRA-90 regulations apply only to policies sold after July 31, 1992.

An alternative form of Medigap insurance, Medicare SELECT, was also created under OBRA-90 and extended in 1995. This program allows insurers to establish restricted networks and cover only those services obtained through the SELECT network, with the exception of emergency care. Medicare SELECT plans must conform to one of the 10 standard benefit packages and are available in a limited number of states.

OBRA-90 also provided for an open enrollment period for the first six months in which beneficiaries are age 65 or older and enrolled in Part B. During open enrollment, beneficiaries cannot be denied a policy or issued a policy with medical underwriting. Pre-existing condition exclusions were limited to six months. After the open enrollment period, beneficiaries had no guaranteed issue rights to Medigap policies. OBRA-90 did not provide for an open enrollment period for beneficiaries leaving Medicare managed care plans to enroll in fee-for-service Medicare. Nonelderly disabled beneficiaries (including those with end-stage renal disease) also were not covered under the open enrollment provisions, although some states do provide protections for this group. ■

financial liability from health care spending.

MedPAC's analysis of Medicare beneficiaries' financial liability indicates that most beneficiaries do not spend a high percentage of income on health care. However, much of the total out-of-pocket spending is concentrated among a small percentage of beneficiaries.

This phenomenon reflects the lack of a catastrophic limit in the traditional Medicare program, which may or may not represent a shortcoming, depending on the perspective from which the program is viewed. If Medicare is viewed as a transfer program, high out-of-pocket spending by a small percentage of beneficiaries does not necessarily represent a shortcoming of Medicare because the program succeeds in transferring resources from the employed population to supplement the resources beneficiaries have available to pay for health care. If Medicare is considered to be an insurance program, however, the lack of catastrophic protection appears problematic because most private health plans place limits on the liability of their policyholders. The history of the Medicare program reflects these different perspectives. The program was not originally intended to provide catastrophic coverage, but policymakers implemented—and later repealed—annual out-of-pocket limits on hospital inpatient care and Part B services under the Medicare Catastrophic Coverage Act of 1998.

Four other findings from the analysis have important implications regarding beneficiaries' financial liability:

- Beneficiaries' out-of-pocket spending is heavily concentrated in three categories: medical provider services and equipment, prescription medicines, and premiums for supplemental coverage. To reduce beneficiaries' out-of-pocket liabilities and improve access to care,

## Cost sharing and uncovered services under Medicare

The traditional Medicare program has two distinct cost sharing systems. One is for services in Part A, which covers hospital inpatient services, care in skilled nursing facilities, some home health services, and hospice care. The other is for services in Part B, which covers physician services, laboratory services, durable medical equipment, hospital outpatient services, home health services not covered under Part A, and other medical services. Also, beneficiaries who choose Part B coverage are responsible for a premium unless they participate in Medicaid, which pays the premium for them. Finally, the traditional program does not cover some products and services at all, most importantly outpatient prescription medicines (with some exceptions), services in long-term care institutions, and long-term home and community-based care.

Medicare+Choice (M+C) enrollees typically face very different cost sharing than do beneficiaries in the traditional program. Under Medicare rules, cost sharing in M+C cannot be greater than cost sharing in traditional Medicare, but it can be less. If an M+C plan has expected Medicare revenues in excess of projected Medicare costs, it must do one of three things: (1) return the surplus to Medicare; (2) pass the surplus through to enrollees in the form of reduced cost sharing for covered services, additional benefits, or reduced premiums for the benefits; or (3) place the surplus in reserve in the Hospital Insurance Trust Fund or the Supplementary Medical Insurance Trust Fund. In nearly all such cases, plans have elected to pass the surplus to enrollees. However, plans cannot use the surplus funds to pay enrollees' Part B premiums. ■

**TABLE 2-6**

**Percentage of Medicare beneficiaries' income spent on health care, 1992-1996**

	Year				
	1992	1993	1994	1995	1996
Mean	19	17	19	19	18
Median	10	9	9	9	9
90 <sup>th</sup> percentile	33	31	32	32	31

Note: Average annual sample size: 12,392. These results are based on individual, not household, data.

Source: MedPAC analysis of Medicare Current Beneficiary Survey Cost and Use files, 1992-1996.

- On average, beneficiaries spend a greater percentage of their budgets on
- policymakers should focus on those attributes of Medicare coverage that most affect out-of-pocket spending on these categories.
- their own health care than do people not eligible for Medicare (primarily those younger than 65).
- Financial liability from out-of-pocket spending on health care may actually be greater than that indicated by our

## Methods used for analyzing financial liability

Throughout this analysis, the basis for measuring beneficiaries' financial liability was out-of-pocket spending on health care, defined as the sum of beneficiaries' out-of-pocket spending on medical goods and services, Part B premiums, and premiums for private supplemental coverage and enhanced benefits under managed care.

The databases we used include the Medicare Current Beneficiary Survey (MCBS) Cost and Use files from 1992 through 1996 and the 1996 Consumer Expenditure Survey (CES). Although both the MCBS and CES collected data on health care spending, out-of-pocket spending on health care at the person level was much lower in the CES. In the CES, mean spending on health care by households made up entirely of Medicare beneficiaries was \$2,466. The average number of people in these households was 1.4, so mean health care spending at the person level was \$1,755 (\$2,466 divided by 1.4). At the same time, mean out-of-pocket spending on health care in the MCBS was \$1,950. The discrepancy likely was due, at least in part, to the fact that the MCBS cross-referenced traditional beneficiaries' use of services with Medicare claims data, but the CES did not.

As part of our analysis, we used the MCBS to analyze trends from 1992–1996. We adjusted dollars to 1992 levels using the gross domestic product deflator. Also, a measure of financial liability used throughout our analysis was the percentage of income that beneficiaries spent on health care. In the MCBS, income for married beneficiaries was reported as joint income, but health care spending was given at the individual level. Therefore, when we determined the percentage of income spent on health care, we divided each married beneficiary's income by 1.26, the ratio of the poverty line for two-person elderly households to the poverty line for single-person elderly households.

We also used the MCBS to compare the financial liability of beneficiaries enrolled in managed care plans, beneficiaries in the traditional program who had Medigap policies, and traditional program beneficiaries who had no supplemental coverage. We adjusted the results for the managed care enrollees and Medicare-only beneficiaries to represent the out-of-pocket spending on acute care that would occur if those populations had the same age and sex profiles as the population with Medigap. ■

analysis—and analyses by other researchers—because we exclude out-of-pocket spending on long-term care services in institutions. Annually, only about 6 percent of beneficiaries pay out-of-pocket for long-term care, but those that do tend to pay large amounts.

- Managed care enrollees have much less financial liability from health care spending, compared with beneficiaries in traditional Medicare

who have Medigap policies. We compared these two groups because beneficiaries often choose between these two types of coverage. Lower financial liability likely indicates that managed care enrollment can improve beneficiaries' access to care. However, most beneficiaries with Medigap coverage could have enrolled in managed care, which suggests that Medigap coverage may have attributes that outweigh its higher cost.

## The percentage of income beneficiaries spend on health care

One key way to measure the extent of financial liability is the percentage of income beneficiaries spend on acute health care. For most beneficiaries, this percentage is not extremely high. MCBS data indicate median values (half of all values are greater, the other half are less) of about 9 percent from 1992–1996 (Table 2-6).

However, our results also show a consistently wide range of percentages of income spent on health care. From 1992–1996, the percentages at the 90<sup>th</sup> percentile (greater than 90 percent of all values) were more than three times higher than those at the median (Table 2-6). There were between 36.7 million and 39.4 million beneficiaries each year from 1992–1996, meaning that 3.7 million to 3.9 million beneficiaries had spending levels above the 90<sup>th</sup> percentile.

Among low-income beneficiaries, the discrepancy between median and 90<sup>th</sup> percentile values was even more pronounced (Table 2-7). These differences occurred because about half of these beneficiaries also had Medicaid, which requires no premium payment and pays many health care costs that Medicare does not.<sup>16</sup> Because of the Medicaid coverage, dually eligible beneficiaries typically have little or no out-of-pocket spending, and generally spend small fractions of their incomes on health care. But among the low-income beneficiaries without Medicaid coverage, even relatively low levels of out-of-pocket spending can result in the spending of large shares of income. Therefore, low-income beneficiaries who have Medicaid coverage likely have much better access to care than do those who do not.

These large differences in values of the percentage of income spent on health care illustrate a weakness of Medicare. However, in considering changes to address this weakness, policymakers

16 An exception is the Specified Low-Income Medicare Beneficiaries program, which pays only for the Part B premium.

**TABLE  
2-7**

**Percentage of income spent on health care by low-income beneficiaries, 1992-1996**

	Year				
	1992	1993	1994	1995	1996
Mean	41	35	43	41	40
Median	14	10	10	10	11
90 <sup>th</sup> percentile	89	68	75	73	71

Note: Average annual sample size: 3,174. Low-income beneficiaries include those who do not live with a spouse and have incomes below the poverty line for a single-person elderly family, as well as those who live with a spouse and have joint incomes below the poverty line for a two-person elderly family. These results are based on individual, not household, data.

Source: MedPAC analysis of Medicare Current Beneficiary Survey Cost and Use files, 1992-1996.

should bear in mind that Medicare provides nearly universal coverage to the elderly, who are generally considered bad risks by private insurance. Further, the program has increased the well being of its covered population by improving its access to care and substantially reducing its financial burden from health care use (Moon 1996). For example, in 1996, Medicare paid about 50 percent of beneficiaries' total medical care expenditures, including long-term care, and paid about 63 percent of beneficiaries' acute care expenditures. Although beneficiaries were responsible for the remaining share of expenses, their financial liability was much less than it would have been in the absence of the program.

**Which services contribute the most to out-of-pocket spending?**

To the extent that policymakers want to reduce the likelihood that beneficiaries spend large percentages of income on health care, it is useful to know which goods and services account for the highest out-of-pocket spending. Policymakers could target the areas of Medicare cost

sharing and uncovered services that contribute the most to high out-of-pocket spending. Also, it is helpful to know if there is a trend in how much beneficiaries spend on each service in relation to other services. Knowing how beneficiaries are changing their patterns of out-of-pocket spending could provide an early warning for policymakers about which services could become more (or less) troublesome in terms of beneficiaries' financial liability.

MCBS data show that from 1992-1996, four categories dominated mean out-of-pocket spending by beneficiaries: supplemental premiums, Part B premiums, medical provider and equipment, and prescription medicines (Table 2-8). However, adjusting all dollars to 1992 levels reveals that mean out-of-pocket spending on prescription medicines actually grew very slowly. Supplemental premiums, when adjusted for inflation, also grew slowly from 1993-1996 (1992 values reflect a different estimation methodology).<sup>17</sup> In contrast, mean out-of-pocket spending on dental services and outpatient hospital care grew much more quickly.<sup>18</sup> However, mean out-of-pocket spending on those services is much smaller in

magnitude compared with the four dominant categories, so the dominant categories are likely to maintain that status in the future. Further, the 95<sup>th</sup> percentile values of out-of-pocket spending on three of the dominant categories—supplemental premiums, medical provider and equipment, and prescription medicines—are much larger than the 95<sup>th</sup> percentile values for other services. Therefore, policymakers concerned about reducing financial liability for beneficiaries with high out-of-pocket spending should focus on these categories.

**Out-of-pocket spending on prescription medicines**

Although our analysis shows prescription medicines to be one of the largest categories of out-of-pocket spending, the total effect of prescription medicines on beneficiaries' financial liability is probably even greater than the analysis reveals. Because Medicare does not cover prescription drugs, HCFA cannot cross-reference information supplied by MCBS survey respondents with Medicare claims data. Further, most beneficiaries have supplemental or managed care coverage that pays part or all costs for prescription medicines (Davis et al. 1999). Prescription medicine coverage increases premiums for supplemental coverage, which increases beneficiaries' out-of-pocket liabilities. Therefore, beneficiaries' financial liability has been affected both directly and indirectly by the substantial recent growth in spending—from \$452 in 1992 to \$581 in 1996, after deflating 1996 dollars to 1992 levels—on prescription medicines by all sources.

**Persistence of financial liability**

An important factor in determining the severity of financial liability is whether

17 Table 2-8 shows a large drop in out-of-pocket spending on supplemental premiums from 1992-1993, in large part because of a change in the method HCFA used in the MCBS to estimate supplemental premiums for beneficiaries who gave questionable responses. In 1992, HCFA assumed that nearly all beneficiaries who had supplemental coverage through former employers paid an out-of-pocket premium for that coverage. Therefore, HCFA usually estimated a positive premium for beneficiaries who reported they paid no premium for employment-related coverage. After 1992, HCFA assumed most beneficiaries who reported no premium were correct. Hence, average out-of-pocket spending on supplemental premiums appears to have dropped substantially from 1992-1993.

18 The percentage change in mean spending on inpatient hospital services was also quite high from 1992-1996: 34.4 percent. However, the mean level was flat from 1993-1996.

**TABLE  
2-8**

**Out-of-pocket spending on health care by category for all beneficiaries, 1992–1996, adjusted for inflation**

Category	Statistic	Year					Percent change 1992–1996
		1992	1993	1994	1995	1996	
Supplemental premiums	Average	\$620	\$480	\$473	\$488	\$498	–19.7%
	95 <sup>th</sup> percentile	\$1,616	\$1,546	\$1,518	\$1,540	\$1,642	
Part B premiums	Average	309	346	378	409	374	20.9
	95 <sup>th</sup> percentile	382	428	469	515	466	
Medical provider & equipment	Average	277	278	318	331	323	16.5
	95 <sup>th</sup> percentile	993	1,030	1,156	1,162	1,166	
Prescription drugs	Average	254	252	249	255	260	2.6
	95 <sup>th</sup> percentile	1,011	1,038	1,018	1,043	1,033	
Dental	Average	110	113	116	128	141	28.6
	95 <sup>th</sup> percentile	590	592	590	641	706	
Outpatient	Average	50	51	55	62	65	28.2
	95 <sup>th</sup> percentile	230	230	239	258	278	
Inpatient	Average	43	57	63	56	57	34.4
	95 <sup>th</sup> percentile	58	118	189	111	54	
Total and other	Average	1,681	1,601	1,683	1,765	1,758	4.6
	95 <sup>th</sup> percentile	3,901	3,885	4,080	4,275	4,331	

Note: Average annual sample size: 12,424. These results are based on individual, not household, data. “Medical provider and equipment” category includes services by medical doctors and other health care practitioners, laboratory and radiology services, durable medical equipment, and nondurable supplies. Dollars were adjusted to 1992 levels using the gross domestic product deflator.

Source: MedPAC analysis of Medicare Current Beneficiary Survey Cost and Use files, 1992–1996.

financial liability, it can affect their access to care.

In any given year, only about 6 percent of beneficiaries pay out-of-pocket for long-term care. However, among the beneficiaries that do pay out-of-pocket, amounts typically are large. Among all Medicare beneficiaries, the 95<sup>th</sup> percentile value of out-of-pocket spending on long-term care exceeded \$1,350 each year from 1992–1996 (Table 2-10). Compared with spending on acute care services (Table 2-8), such spending ranks among the largest categories. The possibility of facing such high levels of out-of-pocket spending can deter some beneficiaries from seeking long-term care when they need it.

Certain groups of beneficiaries bear particularly large burdens of out-of-pocket spending on long-term care. Over the 1992–1996 period, the 95<sup>th</sup> percentile values of out-of-pocket spending on long-term care were much higher for beneficiaries ages 85 and older than for the general Medicare population. Also, the 95<sup>th</sup> percentile values were relatively high for low-income beneficiaries. However, low-income beneficiaries generally had a lesser burden than did older beneficiaries, at least in part because Medicaid pays the long-term care expenses of many low-income beneficiaries.

**Out-of-pocket spending by managed care enrollees versus traditional program beneficiaries**

Because enrollment in Medicare managed care plans has grown rapidly in recent years, this population has become large enough that analysts have an interest in how its access to care compares with that of beneficiaries in the traditional program. This section examines differences between the two groups’ financial liability on health care, which helps to indicate how financial liability affects differences in access to care. Here, “managed care” refers only to health maintenance organizations, because the

that liability is short lived or persists over a number of years. A beneficiary who spends a high percentage of income on health care is less burdened if such spending lasts a short time rather than an extended period.

Our analysis reveals that levels of spending remained fairly consistent over a three-year period. For example, among beneficiaries who were at or above the 90<sup>th</sup> percentile of income spent on health care in 1994 and who lived through 1996, 41 percent were at or above the 90<sup>th</sup> percentile in 1995, and

29 percent were in the same range in 1996 (Table 2-9).

**Out-of-pocket spending on long-term care in institutions**

Medicare is intended to assist beneficiaries in paying for acute care services. The program does not cover long-term care in institutions, though out-of-pocket spending on long-term care substantially increases the financial liability of some beneficiaries. Because out-of-pocket spending on long-term care can drastically affect beneficiaries’

**TABLE 2-9**

**Distribution of 1995 and 1996 percentage of beneficiaries' income spent on health care, by level of 1994 percentage of income spent on health care**

1994 percentage of income percentile	1995 percentage of income percentile					Total*
	0-25	25-50	50-75	75-90	90+	
0-25	64	16	10	6	4	100
25-50	24	46	20	7	4	100
50-75	11	24	44	16	6	100
75-90	7	12	25	41	15	100
90+	5	11	16	28	41	100

1994 percentage of income percentile	1996 percentage of income percentile					Total*
	0-25	25-50	50-75	75-90	90+	
0-25	60	18	12	6	4	100
25-50	26	39	21	7	7	100
50-75	11	24	42	15	7	100
75-90	8	14	31	32	15	100
90+	8	10	23	29	29	100

Note: \* Sums may not total 100 due to rounding. Sample size: 3,084. Analytic sample includes beneficiaries who were alive from 1994 through 1996 and in traditional Medicare over that period.

Source: MedPAC analysis of Medicare Current Beneficiary Survey Cost and Use files, 1994-1996.

**TABLE 2-10**

**Out-of-pocket spending by beneficiaries on care provided in long-term care institutions, 1992-1996, adjusted for inflation**

Population	Statistic	Year				
		1992	1993	1994	1995	1996
All beneficiaries	Average	\$573	\$576	\$597	\$615	\$642
	95 <sup>th</sup> percentile	\$2,263	\$1,522	\$2,074	\$1,738	\$1,350
Age 85 and older	Average	2,904	2,837	2,965	2,937	3,017
	95 <sup>th</sup> percentile	20,316	20,705	21,169	20,692	21,828
Low income	Average	1,004	1,020	1,033	1,120	1,190
	95 <sup>th</sup> percentile	6,118	6,474	6,613	6,909	7,191

Note: Average annual sample sizes: 12,424 for all beneficiaries; 2,049 for age 85 and older; 3,206 for low income. These results are based on individual, not household, data. Long-term care refers to services provided by nursing homes, retirement homes, mental health facilities, and other long-term care facilities. Dollars were adjusted to 1992 levels using the gross domestic product deflator.

Source: MedPAC analysis of Medicare Current Beneficiary Survey Cost and Use files, 1992-1996.

MCBS data include only that type of managed care.

**Medicare managed care enrollees compared with beneficiaries with Medigap**

We compare the financial liability of managed care enrollees to that of beneficiaries in traditional Medicare who purchased Medigap policies because many beneficiaries face the choice of these two options. In general, managed care enrollees have less financial liability for health care spending than do beneficiaries with Medigap, implying managed care may help beneficiaries' access to care. For example, from 1992-1996, managed care enrollees, on average, paid a lower percentage of income on health care (Table 2-11). Also, their mean out-of-pocket spending on health care was much lower (Table 2-12). However, the 95<sup>th</sup> percentiles of out-of-pocket spending for these two populations are more similar than are the mean values, which is due to the catastrophic limits of Medigap coverage. For example, the ratio of mean out-of-pocket spending by beneficiaries with Medigap to mean out-of-pocket spending by managed care enrollees was between 1.65 and 1.98 during the 1992-1996 period. At the same time, the ratio of 95<sup>th</sup> percentile values for the two groups was between 1.29 and 1.64.

The substantial differences in spending between managed care enrollees and beneficiaries with Medigap should be interpreted with the caveat that the data used precede the BBA. The increased cost sharing and reduced benefit packages that managed care enrollees have faced since the BBA, and the increase in premiums from 1999 to 2000, should narrow the financial liability gap.

**Higher financial liability is not a failure of traditional Medicare**

Higher out-of-pocket spending by beneficiaries with Medigap does not indicate a failure of the traditional program. Other factors, besides reducing

**TABLE 2-11**

**Percentage of income spent on health care by beneficiaries with different coverage, 1992-1996**

Population	Year				
	1992	1993	1994	1995	1996
Managed care					
Mean	12	14	15	13	18
Median	7	7	8	8	7
90 <sup>th</sup> percentile	25	28	27	25	26
Medigap					
Mean	28	26	25	26	26
Median	17	15	16	15	16
90 <sup>th</sup> percentile	43	40	40	40	39
Medicare only					
Mean	22	19	25	33	23
Median	10	10	11	11	11
90 <sup>th</sup> percentile	31	32	39	47	34

Note: Average annual sample sizes: 992 for managed care; 3,185 for Medigap; 1,381 for Medicare only. These results are based on individual, not household, data. We adjusted the values for the managed care and Medicare-only populations to match values that would occur if those populations had the same age and sex profiles as the Medigap population.

Source: MedPAC analysis of Medicare Current Beneficiary Survey Cost and Use files, 1992-1996.

**TABLE 2-12**

**Out-of-pocket spending on health care by beneficiaries with different coverage, 1992-1996, adjusted for inflation**

Population	Statistic	Year				
		1992	1993	1994	1995	1996
Managed care	Average	\$1,172	\$1,312	\$1,409	\$1,439	\$1,458
	95 <sup>th</sup> percentile	\$2,701	\$3,198	\$3,611	\$3,402	\$3,336
Medigap	Average	2,325	2,252	2,326	2,377	2,587
	95 <sup>th</sup> percentile	4,451	4,514	4,644	4,589	5,226
Medicare only	Average	1,245	1,269	1,574	1,842	1,438
	95 <sup>th</sup> percentile	3,100	3,128	4,275	5,136	3,818

Note: Average annual sample sizes: 993 for managed care; 3,192 for Medigap; 1,390 for Medicare only. These results are based on individual, not household, data. We adjusted the values for the managed care and Medicare-only populations to match values that would occur if those populations had the same age and sex profiles as the Medigap population. Dollars were adjusted to 1992 levels using the gross domestic product deflator.

Source: MedPAC analysis of Medicare Current Beneficiary Survey Cost and Use files, 1992-1996.

financial liability, affect beneficiaries' decisions to enroll or not enroll in managed care. Many beneficiaries with Medigap coverage could choose managed care, under which they would have less financial liability. They stay in the traditional program presumably because it, combined with Medigap coverage, has attributes that more than offset the additional cost.

Income also may play a role in the willingness of beneficiaries to pay higher out-of-pocket costs for Medigap. Managed care enrollees are more likely to have low incomes than are beneficiaries with Medigap. For example, 19.3 percent of beneficiaries with Medigap who lived in counties with at least one risk plan had incomes of up to \$10,000 in 1996; 22.9 percent of managed care enrollees had incomes of up to \$10,000. However, the income advantage of the beneficiaries with Medigap appears to be small—differences in the shares of beneficiaries in each of the higher-income categories are not statistically significant (Table 2-13).

**Other effects of managed care enrollment on beneficiaries' access to care**

In addition to improving beneficiaries' access to care by reducing their out-of-pocket spending, it appears that managed care also improves the access to care of many beneficiaries by improving their coverage. There is evidence that a large percentage of managed care enrollees who were in the traditional program lacked supplemental coverage before enrolling. In 1998, 26 percent of first-year managed care enrollees who changed enrollment from traditional Medicare did not have supplemental coverage in 1997. In contrast, only 13 percent of the beneficiaries who lived in a county with at least one M+C plan and remained in the traditional program in 1998 were without supplemental coverage in 1997 (Table 2-14).

If one examines out-of-pocket spending on health care and the percentage of income spent on health care by Medicare-

**TABLE  
2-13**

**Income distribution of managed care enrollees and beneficiaries with Medigap who have access to managed care, 1996**

Annual income	Insurance category	
	Managed care	Medigap with risk plan in county
Up to \$10,000	22.9%	19.3%
\$10,000–25,000	45.7	47.8
\$25,000–40,000	18.9	18.6
\$40,000 or more	12.6	14.3

Note: Sample sizes: 1,375 for managed care; 1,683 for Medigap with risk plan in county. Income for single beneficiaries is their individual income. Income for married beneficiaries is their joint income.

Source: MedPAC analysis of Medicare Current Beneficiary Survey Cost and Use file, 1996.

coverage under managed care by substantially increasing their use of services.

**Equity in financial liability between beneficiaries and nonbeneficiaries**

One of the initial goals of the Medicare program was to eliminate the inequity in access to care between beneficiaries and people not eligible for Medicare (Long and Settle 1984). Because financial liability affects access to care, comparing Medicare beneficiaries' financial liability on health care with the financial liability of individuals not eligible for Medicare (nonbeneficiaries) helps indicate the program's success in meeting this goal, and provides another perspective from which to view beneficiaries' financial liability.

Also, comparing what beneficiaries and nonbeneficiaries forgo to purchase health care provides information about the impact on beneficiaries of out-of-pocket spending. For example, if beneficiaries, on average, spend a relatively large fraction of their budgets on health care, are they able to make up for it by spending a relatively small fraction of their budgets on other essential items, or do they forgo items generally considered more discretionary?

Using the 1996 CES to compare the financial liability of beneficiaries and nonbeneficiaries indicates that Medicare may not have eliminated the access inequity between the two groups. Aggregate spending on health care by households with one or more Medicare beneficiaries was a much larger fraction of spending on all budget items, compared with households with no beneficiaries. Not only did beneficiaries face higher financial liability from health care, they were not able to make up for the difference by spending less on other essential budget items. That is, beneficiaries and nonbeneficiaries spent comparable percentages of their budgets on housing and food (Table 2-15).<sup>20</sup>

**TABLE  
2-14**

**Previous year supplemental insurance for beneficiaries in traditional Medicare and first-year Medicare+Choice enrollees who were in traditional Medicare, noninstitutionalized population**

1997 supplemental coverage	1998 Medicare+Choice enrollment	
	Enrolled in Medicare+Choice	Remained in traditional program
No supplemental	25.7%	12.5%
Private	58.8	70.4
Medicaid	5.0	14.0
Other public	3.4	1.6
Nonrisk health maintenance organization	7.2	1.4

Note: Sample sizes: 283 for enrolled in Medicare+Choice; 6,145 for remained in traditional program. Private coverage includes coverage obtained through former employers and individually purchased plans.

Source: MedPAC analysis of Medicare Current Beneficiary Survey Access to Care files, 1997–1998.

only beneficiaries, it is not clear whether managed care enrollment could improve their access to care. On the one hand, from 1992–1996, the mean percentage of income they spent on health care generally was higher than that of managed care enrollees (Table 2-11).<sup>19</sup> On the other hand, their mean out-of-pocket spending generally was similar to that of managed care enrollees (Table 2-12).

Managed care improves access to care for Medicare-only beneficiaries not because it reduces out-of-pocket spending, but because it provides more comprehensive coverage. Previous analysis indicates that Medicare-only beneficiaries use fewer services than they would if they had better coverage (PPRC 1996). Hence, managed care enrollees who previously were Medicare-only beneficiaries likely respond to the more comprehensive

19 In 1995, the mean percentage of income spent on health care by Medicare-only beneficiaries was much higher than in other years. This was due, primarily, to an unusually large outlier value. If this value is removed, the mean falls to 24 percent in 1995.

20 These results are based on average household budgets of \$18,782 for all-Medicare, \$23,029 for some-Medicare, and \$33,288 for no-Medicare.

**TABLE  
2-15**

**Percentage of aggregate expenditures on various budget items, 1996**

Budget item	Percentage of aggregate expenditures		
	Households with Medicare beneficiaries		
	All-Medicare households	Some-Medicare households	No-Medicare households
Health care	13.1	11.1	4.2
Housing	35.2	33.7	31.9
Food	17.5	17.2	16.0
Transportation	17.4	19.0	21.0
Miscellaneous	6.8	7.1	6.0
Entertainment	4.3	4.5	5.5
Clothing	3.0	3.3	4.3
Pensions and payroll taxes	2.5	4.2	11.0

Note: Sample sizes: 3,001 for all-Medicare; 4,521 for some-Medicare; 15,361 for no-Medicare. In all-Medicare households, only Medicare beneficiaries are members. Some-Medicare households contain at least one Medicare beneficiary. No-Medicare households have no Medicare beneficiaries. "Pensions and payroll taxes" category includes life insurance; payroll deductions for Social Security, private pensions, and government pensions; and nonpayroll contributions to individual retirement plans.

Source: MedPAC analysis of Consumer Expenditure Survey data, 1996.

**Need for continued monitoring of beneficiary access to quality health care**

MedPAC believes that continued, close monitoring is required in a time of ongoing, fundamental change in Medicare program policies. The Commission is therefore concerned about the limited extent to which the Secretary has taken steps to assess and report publicly on the implications of Medicare policy changes for beneficiary access to quality health care. Although the Secretary was required to monitor and report annually to the Congress on beneficiary access to care, she has not issued a report since 1995 and the mandate has now expired. This former mandate, motivated by concerns that the move to a physician fee schedule could have negative implications for beneficiary care, has not been replaced with a comparable requirement to monitor changes in beneficiary access that might

occur as a result of BBA-mandated changes in payment methods and amounts. Because many changes now under way in Medicare are comparable in scope to the phase-in of the physician fee schedule, MedPAC believes that a focused effort to identify emerging access issues, evaluate the nature and scope of access problems, and issue findings and recommendations for any needed policy changes is in order.

**RECOMMENDATION 2A**

**The Secretary should periodically identify potential problems in beneficiaries' access to care that arise in the evolving Medicare program and should report annually to the Congress on findings from studies undertaken to examine those potential problems.**

Although studies by both HCFA and PPRC have concluded that implementation of the Medicare fee

schedule has not worsened existing access problems or caused new ones, continued monitoring is needed because of the nature and magnitude of ongoing changes in the Medicare program that could affect access.<sup>21</sup> To reflect current access issues, such monitoring might appropriately adopt a somewhat different focus and methodology for assessment. For instance, access monitoring efforts now need to account for the growing presence of the M+C program. Monitoring plan enrollees' access to services can provide information on the extent to which Medicare policy changes or other factors result in changes in enrollees' abilities to obtain needed medical care. M+C program growth may also have implications for ongoing efforts to monitor access to care of beneficiaries in the traditional program. For example, managed care growth could result in changes in the characteristics of the population remaining in the traditional program. Any such changes need to be accounted for in analyses of time trends. Such growth could also have a spillover effect on health care practices in the traditional indemnity sector.

Another access issue that must be considered in designing new monitoring systems is the question of how to obtain information on access to types of health care services for which beneficiaries may not be able to assess their own needs. Although monitoring access to physician services specifically, and monitoring access to care generally, can draw upon information from beneficiaries on their experiences and perceptions, beneficiaries may be less able to assess the extent of their own access to post-acute care services. Therefore, a plan for monitoring access to these services will likely need to rely on another source of routinely available data. MedPAC is sponsoring work to determine the feasibility of developing measures of beneficiaries' use of needed SNF care that draw upon routinely generated administrative data; this should provide information on the merit of this approach.

21 See MedPAC's June 1998 Report to the Congress for a summary and findings of previous studies of Medicare beneficiary access to care.

## Monitoring access to physician services

The Omnibus Budget Reconciliation Act of 1989 (OBRA-89) established both Medicare physician payment reform and a mandate for the Secretary of Health and Human Services to monitor the effects of reform on beneficiary access to care. OBRA-89 called for the Secretary to monitor and report annually on changes in utilization and access to care by April 15 of each year (beginning in 1991). It also established a requirement that the Physician Payment Review Commission (PPRC) review and comment on the Secretary's report. Despite the OBRA-89 requirement, the Secretary has not issued a report on beneficiary access to care and service utilization since 1995; this may be due in part to the failure of previous studies to uncover changes in access.

The Secretary—like the PPRC—has failed to find any changes in beneficiary access as a result of implementing the Medicare Fee Schedule as a mechanism for paying physicians. Changes in use of services (such as a decline in cataract surgeries) could be explained by changes in medical practice or in the health care needs of the beneficiary population. Furthermore, no changes in the extent to which beneficiaries perceived problems obtaining medical services or in characteristics of beneficiaries more likely to experience problems were found in previous studies. Because the introduction of the fee schedule

provided the impetus for the access reporting mandate, the failure to uncover changes in access limited the report's ongoing significance in terms of public policy.

The Secretary is expected to release early this year her final report on beneficiary access to physician services, although the mandate to report annually on beneficiary access expired December 21, 1999, in accordance with the Federal Reports Elimination and Sunset Act of 1995 (P.L. 104-66, Section 3003). According to HCFA staff, the Secretary's forthcoming report will be similar to previous reports in the types of analyses conducted, but will be scaled back from previous studies in terms of analytic scope and depth. The report will include descriptive data on changes in service use, drawing upon claims data from 1997 and earlier years, as well as analyses of beneficiary perceptions and experiences relating to access, drawing upon data from the 1997 Medicare Current Beneficiary Survey.

Upon release of this report to the Congress, MedPAC will issue comments on the Secretary's findings, methodology, and recommendations, if any. In developing its comments, MedPAC will draw on its own work to assess beneficiary access, as well as on the input of a panel of physician experts, as required by law. ■

In the absence of careful evaluations of the effects of new policies on beneficiary care, policymakers must rely on anecdotes and secondary sources of information in deciding how to proceed. Therefore, designing and conducting timely studies of access—and drawing reasonable conclusions and making policy recommendations on the basis of those findings—will remain an important function of MedPAC and should continue to be an important responsibility of the Secretary. ■

## References

---

- Abt Associates Inc. Survey of home health agencies, No. 99-2. Cambridge (MA), AA Inc. Report to the Medicare Payment Advisory Commission under contract No. T-81414343. September 1999.
- Abt Associates Inc. Development and refinement of the RUG-III resident classification system: preliminary findings. Baltimore (MD), AA Inc. Report to the Health Care Financing Administration under contract No. 500-96-0003, TO#5. October 1998.
- Adler GS. A profile of the Medicare Current Beneficiary Survey, Health Care Financing Review. Summer 1994, Vol. 15, No. 4, p. 152–163.
- American Health Care Association. The relationship between care per episode of care and skilled nursing facility patient characteristics. Washington (DC), AHCA. July 1999.
- Davis M, Poisal J, Chulis G, et al. Prescription drug coverage, utilization, and spending among Medicare beneficiaries, Health Affairs. January/February 1999, Vol. 18, No. 1, p. 231–243.
- Employee Benefits Research Institute. EBRI Health Benefits Databook. Washington (DC), EBRI. November 1999.
- General Accounting Office. Skilled nursing facilities: Medicare payment changes require provider adjustments but maintain access, No. HEHS-00-23. Washington (DC), GAO. December 1999a.
- General Accounting Office. Medicare Home Health Agencies: Closures continue, with little evidence beneficiary access is impaired, No. HEHS-99-120. Washington (DC), GAO. May 1999b.
- Laschober MA, Neuman P, Kitchman MS, et al. Medicare HMO withdrawals: What happens to beneficiaries? Health Affairs. November/December 1999, Vol.18, No. 6, p. 150–157.
- Long LH, Settle RF. Medicare and the disadvantaged elderly: objectives and outcomes, Milbank Memorial Fund Quarterly. 1984, Vol. 62, No. 4, p. 609–656.
- Medicare Payment Advisory Commission. Report to the Congress: selected Medicare issues. Washington (DC), MedPAC. June 1999a.
- Medicare Payment Advisory Commission. Report to the Congress: Medicare payment policy. Washington (DC), MedPAC. March 1999b.
- Medicare Payment Advisory Commission. Report to the Congress: context for a changing Medicare program. Washington (DC), MedPAC. September 1998.
- Moon M. What Medicare has meant to older Americans, Health Care Financing Review. Winter 1996, Vol. 18, No. 2, p. 49–59.
- National Subacute Care Association and American Health Care Association. A prospective study of new case-mix indices for subacute care. Washington (DC), NSCA and AHCA. June 1999.

Nelson L, Brown R, Gold M, et al. Access to care in Medicare HMOs, Health Affairs. March/April 1997, Vol. 16, No. 2, p.148–156.

Office of Inspector General. Early effects of the prospective payment system on access to skilled nursing facilities: nursing home administrators' perspective, No. OEI-02-99-04400. Washington (DC), OIG. October 1999a.

Office of Inspector General. Medicare beneficiaries' access to home health agencies, No. OEI-02-99-00530. Washington (DC), OIG. October 1999b.

Office of Inspector General. Early effects of the prospective payment system on access to skilled nursing facilities, No. OEI-02-99-04401. Washington (DC), OIG. August 1999c.

Physician Payment Review Commission. Annual report to the Congress. Washington (DC), PPRC. 1997.

Physician Payment Review Commission. Annual report to the Congress. Washington (DC), PPRC. 1996.

Physician Payment Review Commission. Monitoring access of Medicare beneficiaries, No. 95-1. Washington (DC), PPRC. May 1995.

Prospective Payment Assessment Commission. Report and recommendations to the Congress. Washington (DC), ProPAC. March 1997.

Schoenman JA, Cheng CM. Results of the Medicare Payment Advisory Commission's 1999 survey of physicians about the Medicare program, contract research series No. 99-1. Washington (DC), MedPAC. September 1999.

Weller W, Health Insurance Association of America. Telephone conversation with Chantal Worzala, MedPAC. Washington (DC). December 21, 1999.

CHAPTER 3

---

**Revising payment methods and  
monitoring quality of care  
in traditional Medicare**

---

# R E C O M M E N D A T I O N S

## **Payment for home health services**

**3A** The Secretary should implement the proposed prospective payment system for home health services on October 1, 2000. To the extent possible, she also should refine the system's case-mix adjustment before it is implemented.

.....

**3B** The Secretary should vigorously monitor home health agency behavior under the prospective payment system.

.....

**3C** The Congress should require that HCFA establish a prospective payment system for home health goods and services that blends fixed episode payments and per-visit payments.

.....

**3D** The Secretary should use routinely collected data to refine the case-mix weights over time.

.....

**3E** The Secretary should use a home health agency wage index to adjust the prospective payment system rates for local wages.

## **Monitoring the quality of post-acute care**

**3F** The Secretary should establish systems for routinely assessing the quality of post-acute care and should use the information these systems generate to: evaluate the effects of new payment systems on quality of care, focus quality assurance activities, facilitate continuous quality improvement, and promote informed patient decisionmaking.

.....

**3G** The Secretary should coordinate systems for monitoring post-acute care quality across all service settings to: assess important aspects of the care uniquely provided in a particular setting, compare certain processes and outcomes of care provided in alternative settings, and evaluate the quality of care furnished in multiple-provider episodes of post-acute care.

.....

**3H** The Secretary should sponsor the development of post-acute care quality measures needed to monitor outcomes—such as beneficiary health and functional status—and the appropriate use of services.

.....

**3I** The Secretary should review all post-acute care data collection requirements. Each item should have an explicit rationale, and only information needed for accurate billing, risk adjustment, or quality measurement should be required.

*Recommendations continued on next page*

**Refining payment for care in hospitals**

**3J** The Congress should combine prospective payment system operating and capital payment rates to create a single prospective rate for hospital inpatient care. This change would require a single set of payment adjustments—in particular, for indirect medical education and disproportionate share hospital payments—and a single payment update.

.....

**3K** The Commission recommends continuing the existing policy of adjusting per case payments through an expanded transfer policy when a short length of stay results from a portion of the patient’s care being provided in another setting.

.....

**3L** To address longstanding problems and current legal and regulatory developments, Congress should reform the disproportionate share adjustment to: include the costs of all poor patients in calculating low-income shares used to distribute disproportionate share payments, and use the same formula to distribute payments to all hospitals covered by prospective payment.

.....

**3M** To provide further protection for the primarily voluntary hospitals with mid-level low-income shares, the minimum value, or threshold, for the low-income share that a hospital must have before payment is made should be set to make 60 percent of hospitals eligible to receive disproportionate share payments.

**Improving payment policies for physician services**

**3N** HCFA should continue to work with the medical community in developing guidelines for evaluation and management services, minimizing their complexity, and exploring alternative approaches to promote accurate coding of these services.

.....

**3O** HCFA should pilot-test documentation guidelines for evaluation and management services before their implementation, and/or pilot test any alternative method. The agency should continue to work with the medical community in developing the pilot tests, and should ensure adequate time for physician education.

.....

**3P** HCFA should disclose coding edits to physicians and should seek review of the appropriateness of those edits by the medical community.

## Revising payment methods and monitoring quality of care in traditional Medicare

**I**n its traditional fee-for-service program, Medicare pays for thousands of covered products and services furnished by a multitude of providers—health care professionals, facilities, and suppliers—in hundreds of market areas nationwide. To ensure that its beneficiaries have access to necessary care, Medicare’s payment policies and methods must set payment rates that approximate the costs an efficient provider would incur in furnishing high-quality care. Meeting this goal under varied market conditions in many different health care settings is a complex challenge, and the Congress relies on the Medicare Payment Advisory Commission for help in the form of objective analysis, advice, and recommendations. This chapter presents results from the Commission’s analyses of the fee-for-service payment policies and methods Medicare uses to pay for care in a number of settings. It also includes our recommendations to the Congress and the Secretary of Health and Human Services for improving payment methods and monitoring quality of care.

### In this chapter

---

- Rethinking payment for post-acute care
  - Monitoring the quality of post-acute care
  - Refining payments for inpatient care in prospective payment system hospitals
  - Improving payment for physicians’ services and care in hospital outpatient departments
-

In its traditional fee-for-service program, Medicare uses separate payment systems to compensate each type of provider for furnishing covered services to beneficiaries. Some, such as those for hospital inpatient acute care and physician services, are well-established prospective payment systems.<sup>1</sup> Many others—including some ambulatory care payment systems and most systems for post-acute care services—still determine providers' payments partially based on their incurred costs.

The Balanced Budget Act of 1997 (BBA) required the Health Care Financing Administration (HCFA) to replace many of its cost-based payment methods with new prospective payment systems (PPSs). The Balanced Budget Refinement Act of 1999 (BBRA) mandated further changes in Medicare's payment methods. As a result, policymakers are in the process of rethinking payment system designs for hospital outpatient departments, skilled nursing facilities, home health agencies, inpatient rehabilitation facilities, and long-term care hospitals. In addition, policymakers are considering revisions to some features of other payment systems, including those for outpatient therapy, physician services, and hospital inpatient acute care.

Under the law, the Medicare Payment Advisory Commission (MedPAC) must review the design and implementation of these policy changes. In addition, we make annual recommendations to the Congress on updating Medicare's payments. In developing analyses and recommendations for each payment system, we are guided by the framework for considering Medicare payment policy issues described in our March 1999 report to the Congress (MedPAC 1999c). That policy framework is structured around the major design elements of payment systems:

- the unit of payment,
- product classification systems and relative weights,
- adjustments to the payment rates,
- initial payment levels, and
- payment updates.

The first three elements, discussed in this chapter, determine the distribution of payments among specific services and providers. The other two elements govern the amount of money in the payment system and are addressed in Chapter 4.

How closely Medicare's payment rates match efficient providers' costs depends heavily on policymakers' choices among the various options for each of these design elements. Making good choices requires an understanding of the characteristics of the products and services Medicare buys, the factors that drive efficient providers' costs, and the incentives for efficiency that payment methods create.

The first design element, the unit of payment, can be an individual product or service or a bundle of services, such as an inpatient stay, an episode of care, or a specified period of time. Larger units of payment include more services, thereby increasing providers' flexibility to economize on the mix and quantity of services and related inputs used to produce the unit. Larger payment units, however, offer no financial incentive to deliver specific services. As a result, providers may respond to the incentives of larger units in less desirable ways, such as stinting on specific services or inputs, or increasing the number of units they furnish.

The second design element consists of two interrelated parts. One is the classification system, which defines distinct services or products, consistent with the unit of payment, that are expected

to require different amounts of providers' resources. The other is a set of relative weights that measures the expected relative costliness of a unit of the product in each classification category, compared with the average cost across all categories.

The third design element—adjustments to the payment rates—allows for differences in providers' circumstances, such as variations in local prices for inputs, which may account for more than 50 percent of the observed variation in providers' costs for a given product or service. Other adjustments to payments may be desired to account for unusual circumstances, such as the delivery of specialized types of care, or special characteristics of services and beneficiaries that affect providers' costs.<sup>2</sup>

Making good choices among the policy options for each design element, however, is only one of the challenges policymakers must overcome. They also must ensure that the selected policies are applied effectively and efficiently. Applying these policies in a dynamic health care system involves uncertainty; therefore, beneficiaries' access to care and the quality of the care they receive must be monitored, to recognize when Medicare's payment systems may not be performing as policymakers intended.

Effectively applying payment design choices involves at least two important tasks: developing essential tools, such as product classification systems, and ensuring collection of accurate information without imposing unnecessary burdens on providers or beneficiaries. Limitations in the classification systems, relative weights, payment adjustments, or related information may cause Medicare to pay too much for some products and services and too little for others. Providers have financial incentives to furnish more units of a product if the payment rate exceeds costs per unit, and to limit beneficiaries' access to services if the payment rate falls

1 Under prospective payment, providers' payments are based on predetermined rates and are unaffected by their incurred costs or posted charges.

2 Hospitals that provide organ transplant surgery exemplify providers with special characteristics. These hospitals incur highly variable costs for organ acquisition. Failing to recognize these costs would give the hospitals strong incentives to stop offering transplant services.

below unit costs. Discrepancies between payments and costs thus may lead to excess program spending or access and quality problems for beneficiaries.

Monitoring beneficiaries' access to quality health care is a task not yet mastered by any insurer, including Medicare. Consequently, policymakers may not know when discrepancies between payments and costs are affecting the care beneficiaries receive or their ability to obtain care. Because of fundamental changes in Medicare's payment systems for post-acute care, we have focused special attention on how to assess the effects of these changes while developing information that also can be used to meet other program objectives.

The broad scope of this chapter reflects the diversity of Medicare's fee-for-service payment methods and the challenges facing policymakers in different settings. We begin by examining post-acute care payment methods, addressing proposals for rethinking payment for home health services, care in skilled nursing facilities, outpatient therapy services, and care in inpatient rehabilitation facilities. Then we focus on recommendations for monitoring the quality of post-acute care, a particularly germane topic given the major changes in payment methods for these services.

The next section considers several potential refinements to Medicare's PPS for hospital inpatient care. Here, we present analyses and recommendations on combining payments for operating and capital costs, improving the patient classification system and relative weights, expanding the transfer payment policy, and changing how disproportionate share payments are distributed. We conclude by exploring potential refinements to Medicare's payment systems for physicians' services and ambulatory care facilities. In this section, we address improving documentation guidelines for evaluation and management services and disclosing coding edits for physicians' services. We also describe the status of the PPS for hospital outpatient department services.<sup>3</sup>

---

## Rethinking payment for post-acute care

---

Payment for post-acute care is in flux, changing from cost-based to prospective payment in response to mandates in the Balanced Budget Act (BBA) of 1997 and the Balanced Budget Refinement Act (BBRA) of 1999. By October 2002, payment for almost all post-acute care will have changed or begun to change to prospective systems. Payment for skilled nursing facility (SNF) services has been prospective since July 1, 1998. Payment for both home health and inpatient rehabilitation services will be made prospectively as of October 1, 2000. Payments for long-term care hospital and inpatient psychiatric services are scheduled to be made prospectively as of October 1, 2002. Payment for outpatient therapy services has been made on the basis of the physician fee schedule since January 1999, and HCFA is required to report to Congress on recommendations for a different payment system in January 2001. These mandated changes were in response to Congressional concern about rapid growth in spending for post-acute care, which averaged increases of more than 20 percent annually since the early 1990s.

Changing from cost-based to prospective payment systems alters the financial incentives for post-acute providers, and beneficiaries may experience difficulty in obtaining needed care as providers respond to new incentives. This section focuses on developing new payment systems for services furnished by the major post-acute providers—home health care, SNF care, outpatient therapy, and inpatient rehabilitation. For home health services, we examine the unit of payment chosen for the PPS, the related classification system, and the wage adjustment made to the payment rates, and make recommendations about refining and improving each of these components. Although we support HCFA's progress to date, we discuss preliminary evidence of the need to refine the PPS for SNF care and Congressional efforts to temporarily

compensate for shortcomings of this payment system. We discuss the unit of payment for outpatient therapy imposed by the BBA and the need for more information to develop a new payment system for therapy services. Finally, we briefly present information about the unit of payment and classification system HCFA will use for the inpatient rehabilitation PPS.

## Developing a prospective payment system for home health services

The BBA required the Secretary of the Department of Health and Human Services to design and implement a PPS for home health services and supplies, and established the interim payment system (IPS) for use until the PPS was implemented (see text box, p. 56). These changes were responses to an average annual growth rate of 26.7 percent in Medicare spending for home health care from 1990–1997, which was more than three times the growth of the Medicare program as a whole.

HCFA has developed a PPS and proposes that all home health agencies (HHAs) transition to it on October 1, 2000. Though MedPAC generally supports the agency's approach, we make several recommendations to improve it over the longer term.

## Choosing the appropriate unit of payment

The unit of payment under HCFA's proposed PPS will be a 60-day episode that includes all home health services and supplies except durable medical equipment (see text box, p. 57). The payment will be adjusted for variation in case-mix, largely based on a patient assessment, and wages.

Because payments are not tied to costs, the PPS creates incentives for providers to become more efficient. However, it also introduces financial incentives to which providers may respond in less desirable ways. HHAs may take inappropriate actions to maximize revenues or stint on

---

3 The Commission is awaiting the opportunity to review HCFA's forthcoming rule on the PPS for hospital outpatient services.

## Home health interim payment system

The Balanced Budget Act of 1997 (BBA) established an interim payment system (IPS) effective October 1, 1997 to control payments until a prospective payment system could be developed and implemented. The IPS controls average spending per visit and average annual spending per user. Spending per visit is controlled by an aggregate agency limit based on per-visit costs. Average annual spending per user is controlled by an aggregate limit on agency spending—the aggregate per-beneficiary limit—based on a blend of historical per-user costs for the agency and agencies in the region. By requiring HCFA to use 1994 as a base for the IPS, the Congress essentially set service levels in that year as a standard.

In general, the IPS appears to have accomplished what Congress intended: use of home health services in 1998 decreased below 1994 levels. The average number of visits per beneficiary using home health services increased from 1994–1997, but dropped substantially in 1998, returning to about the average for 1992. The median number of visits, however, may be a better indicator of central tendency for home health use. The median increased from 1994–1997, then dropped below 1994 levels in 1998 (Table 3-1). Although the number of beneficiaries receiving home health services decreased from 1997 to 1998, the number of users per 1,000 fee-for-service beneficiaries was greater in 1998 than in 1994. ■

The home health PPS is based on research that examined more than 22,000 episodes of care for 17,000 patients. When the episodes were classified into 80 groups, however, the number of episodes in some groups became smaller than what is generally considered desirable to develop case-mix weights. More than half of the Home Health Resource Groups (HHRGs) in the case-mix study contained fewer than 50 cases, which may make the rates for these smaller cells unstable. Before the final rule is published, HCFA should use Outcome and Assessment Information Set (OASIS) data—which agencies have been submitting since August 1999—and claims data to refine the case-mix adjustment and stabilize the rates for smaller case-mix classification groups.

### RECOMMENDATION 3B

**The Secretary should vigorously monitor home health agency behavior under the prospective payment system.**

Prospective payment for home health care raises two related problems: how to assure that HHAs accurately assess beneficiaries' needs and report case-mix classification assignments, and how to monitor services to ensure that beneficiaries are receiving appropriate care.

Because the OASIS assessment largely will determine the episode payment, HCFA must develop a comprehensive plan to ensure the accuracy of reporting. This plan should include mechanisms to audit providers, especially those who appear to be manipulating the payment system. Given expected large shifts in payments, some HHAs will face strong financial incentives to shift Medicare beneficiaries to higher-weighted groups to maintain payment levels. HHAs also will have incentives to stint on services to reduce costs while maintaining revenues. At the same time, the low-use episode threshold creates an incentive for HHAs to provide a few visits more than the threshold to generate payment for an entire episode.

In the short term, the Commission urges HCFA to direct regional home health intermediaries to focus medical reviews on those providers who have many

care to minimize costs. This limitation notwithstanding, MedPAC generally supports the approach HCFA has proposed.

### RECOMMENDATION 3A

**The Secretary should implement the proposed prospective payment system for home health services on October 1, 2000. To the extent possible, she also should refine the system's case-mix adjustment before it is implemented.**

Although the proposed PPS needs refinement, it represents a substantial

improvement over the IPS by accounting for case mix. A MedPAC-sponsored study found that, in response to IPS, a number of HHAs reported changing the way they operate, including being more careful about accepting long-term or higher-cost patients (Abt Associates 1999). Some HHAs reported not accepting some beneficiaries, most often long-term, chronic, or diabetic patients. Under the PPS, agencies will be paid a higher rate for patients needing more care and eligible long-term patients may have unlimited episodes. In addition, the PPS incorporates an outlier policy for beneficiaries with extraordinary costs during an episode.

**TABLE 3-1**

**Home health users, average and median visits per user in 1994, 1997, and 1998**

Fiscal year	1994	1997	1998
Home health users	3.1 million	3.5 million	3.0 million
Users per thousand FFS beneficiaries	87	103	90
Average visits per user	63	73	51
Median visits per user	26	28	21

Note: FFS (fee-for-service).

Source: MedPAC analysis of HCFA home health claims and enrollment data.

## Elements of the home health prospective payment system

The home health prospective payment system (PPS) will be fully implemented on October 1, 2000 and will pay for services on the basis of 60-day episodes. Beneficiaries can receive services for an unlimited number of episodes if they meet home health eligibility and coverage requirements.

The 60-day episode matches the basic time frame under which home health agencies (HHAs) historically have been required to manage beneficiaries' home health needs. HHAs traditionally prepare 60-day plans of care and are required to obtain physician certification every two months. The 60-day episode also matches the schedule for the Outcome and Assessment Information Set (OASIS), the patient assessment that underlies the case-mix system.

The PPS will classify patients using Home Health Resource Groups (HHRGs), an 80-group case-mix system consisting of three dimensions based on beneficiaries' scores on data elements, primarily from the OASIS (Table 3-2). The sum of scores for each data element is used to assign each patient to a severity level on a given dimension. The case-mix system defines the set of groups from all possible combinations of severity levels across the three dimensions.

Payment weights for HHRGs reflect the average relative level of resources used to provide home health services to patients in each group.<sup>4</sup> To determine the payment for each group, the payment weight will be multiplied by the standardized payment amount per 60-day episode. The labor-related component of the payment (78 percent) will be adjusted by the hospital wage index for the location in which the

beneficiary receives services.

To compute the standardized national payment rate for 60-day episodes for fiscal year (FY) 2001, HCFA used a nationally representative sample of 567 comprehensively audited HHA cost reports for FY 1997. All costs of home health visits were used to derive a national cost per visit by discipline. To calculate total costs per episode, the agency multiplied the average number of visits per episode by discipline—based on 1997 episodes with more than four visits—by the average cost per visit. HCFA adjusted estimated costs per episode to account for costs of nonroutine medical supplies and ongoing OASIS reporting. The agency then standardized the PPS amount to remove the effects of differences in case-mix and wages and adjusted it to comply with the BBA budget-neutrality requirement and to account for outlier payments.<sup>5</sup>

Episode payment rates are intended to provide full payment for all home health goods and services (including medical supplies, but not durable medical equipment) provided during the 60-day period. The PPS requires HHAs to bill for all services provided in an episode on one claim, whether services are provided directly or by an external supplier.<sup>6</sup> HHAs will be paid under a split payment method, with 50 percent paid when the initial claim is submitted and 50 percent after the final claim is submitted. The final payment will adjust for exceptions to the 60-day episode and for medical review determinations. A new initial and final bill must be submitted for each recertified episode.

There will be four exceptions to the 60-day episode:

- When patients receive four or fewer visits within an episode, providers will be paid a prospective national standardized per-visit amount by discipline for each visit type furnished.
- When a patient elects to transfer to a second HHA during an episode, the first agency will receive a partial episode payment (PEP) and a new episode will begin for the second provider if the agencies are not commonly owned.
- When a patient is discharged from an HHA and returns to the same agency within the 60-day episode, the provider will be paid a PEP for the first portion and a new episode starts after the patient returns.
- When a patient experiences a significant change in condition, resulting in a new case-mix assignment, the HHA will be paid an episode payment adjusted for the time before and after the condition change.<sup>7</sup>

Outlier payments will be made for 60-day episodes with extraordinary costs. HHAs will be eligible for additional payments when their estimated costs for an episode exceed a standardized threshold amount for all case-mix groups; HHAs will receive 60 percent of the estimated costs above the threshold amount, in addition to the case-mix adjusted episode payment. Outlier payments are financed by making base payments 5 percent less than they would be otherwise. ■

4 Weights range from 0.5 to 2.6 and are multiplied by the standardized payment amount to obtain the case-mix adjusted payment. Average resource use per discipline was estimated using data from the case-mix demonstration. HCFA used visit logs for patients in the demonstration to calculate total visit time. Visit minutes were multiplied by a standard labor cost for the type of visit, then summed for all visits within the episode to obtain the episode cost. Because visit lengths may vary substantially, HCFA did not use visit counts as a measure of resource use.

5 The BBA mandated that the PPS in FY 2001 be budget neutral to the current interim payment system with a 1.5 percent reduction in limits. The BBA postponed the reduction until after the PPS had been in effect for one year and required the Secretary to report on the need for such a reduction within six months after the PPS was implemented.

6 HCFA originally designed the home health consolidated billing to include durable medical equipment based on the BBA, but the BBA excluded this designation.

7 A significant change in condition is defined as one unanticipated and sufficient to trigger a new OASIS assessment that results in a new case-mix assignment.

**TABLE  
3-2**

**Dimensions, levels of severity, and items used for the home health case-mix system**

Source of Item	Dimensions		
	Clinical severity (four levels)	Functional status (five levels)	Service use (four levels)
Outcome and Assessment Information Set	<ul style="list-style-type: none"> <li>—diagnoses (orthopedic, neurologic, or diabetic conditions)</li> <li>—therapies used at home (IV or infusion therapy, parenteral and enteral nutrition)</li> <li>—vision status</li> <li>—pain frequency</li> <li>—status of pressure ulcers, stasis ulcers, and surgical wounds</li> <li>—dyspnea</li> <li>—urinary and bowel incontinence</li> <li>—bowel ostomy</li> <li>—cognitive/behavioral problems</li> </ul>	<ul style="list-style-type: none"> <li>—six activities of daily living:                             <ul style="list-style-type: none"> <li>upper body dressing</li> <li>lower body dressing</li> <li>bathing</li> <li>toileting</li> <li>transferring</li> <li>locomotion</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>—pre-admission location 14 days preceding admission to home health (home, hospital, rehabilitation, or skilled nursing facility)</li> </ul>
Initial estimate of therapy use, confirmed by claim at the end of an episode			<ul style="list-style-type: none"> <li>—projected receipt of PT, OT, and ST totaling 8+ hours (minimum of 10 visits)</li> </ul>

Note: PT (physical therapy), OT (occupational therapy), ST (speech therapy), IV (intravenous).

Source: MedPAC summary of HCFA's proposed rule.

episodes in which the number of visits slightly exceeds the low-use threshold (five or six visits) and also to review randomly selected episodes with visits just more than the threshold to achieve a sentinel effect. If HHAs know they are subject to audits, they may be less likely to manipulate low-use episodes.

Monitoring to detect stinting will be more difficult. Ultimately, developing standards to judge the appropriateness of home health services will be important for monitoring. HCFA's current work on normative standards may provide a first step in this direction. The Commission has previously noted that additional methods to ensure appropriate use of home health services need to be explored, including clear definitions of home health eligibility and coverage guidelines (MedPAC 1999c). The effects of the PPS on beneficiaries' access to home health services—in particular, whether those beneficiaries who need more care are

receiving it—and on rural or sole community HHAs also must be monitored.

In the future, a blended payment system could address the issue of HHAs inappropriately maximizing payments or minimizing costs. Such a system, using a combination of per-visit and fixed episode payments, could neutralize the financial incentives of both types of payments.

**RECOMMENDATION 3C**

**The Congress should require that HCFA establish a prospective payment system for home health goods and services that blends fixed episode payments and per-visit payments.**

HHAs have responded strongly to payment incentives in the past and MedPAC expects them to react strongly to incentives—good and bad—created by an episode-based PPS. To counteract incentives that may affect beneficiaries'

access to care, we recommend that HCFA establish a prospective payment that blends fixed episode payments with per-visit payments, using a standardized rate per visit.<sup>8</sup> This blended payment would reduce incentives to avoid patients with expected costs above the episode payment, stint on services, or add a few visits more than the low-use episode threshold to generate a full episode payment. Although HHAs would have a greater incentive to add services to increase payment than under a fixed episode payment, a carefully designed payment system would lessen incentives created by a cost-based system.

The Commission recognizes that such a blended payment system may require statutory change. Revising the PPS will also take time and, therefore, we encourage HCFA to implement the proposed 60-day episode payment system while pursuing revisions as expeditiously as possible.

8 Although we use the term "visit" to describe the unit of service common to home health at this time, we intend that this term be used more broadly to describe the elements that would be included in a blended payment system for home health services.

## Improving the classification system

Ensuring the accuracy of Medicare payments will require refining the PPS over time. For example, the inpatient hospital PPS—the gold standard for prospective payment—is refined annually.

### RECOMMENDATION 3D

#### The Secretary should use routinely collected data to refine the case-mix weights over time.

To ensure that relative payments are appropriate, case-mix weights should evolve in response to changes in practice patterns and technology that affect the level of resources required to furnish home health services to different types of patients. Two approaches could be taken to change the HHRG weights over time. Both would use standard administrative data to recalibrate the weights. The first would use information HHAs are required to provide about time spent in providing services in 15-minute increments. Under this approach, proxy costs for each visit would be developed by multiplying each increment by the estimated national cost of the discipline providing the services. The costs for an episode would be determined by summing the proxy costs for all visits associated with that episode. At that point, HCFA would follow a process similar to that used to recalibrate the diagnosis related groups payment rates. The second approach would use the charge information on the bill. Under both systems, the weights will automatically account for any shift in admission practice or coding behavior.

#### Making other adjustments to payment rates

Differences in wages among geographic areas account for much of the observed nationwide variation in providers' costs for home health services. HCFA has estimated that 78 percent of the home health episode payment is labor-related and therefore

affected by local variation in wages. Thus, errors in the wage index used to adjust payment can have substantial effects on the appropriateness of payments.

The wage adjustment for the proposed home health PPS is based on wage and hour data from hospitals. Using the hospital wage index to adjust payment rates for geographic differences is expedient, but there are two problems with using this index for the home health setting. First, the occupational mix is presumably different in the two settings. Second, the hospital wage index in and of itself does not control for occupational mix, which varies substantially among hospitals according to size and teaching status. Because markets vary in their mix of hospitals, the wage index reflects differences from this variance in the average wage rate across markets.

### RECOMMENDATION 3E

#### The Secretary should use a home health agency wage index to adjust the prospective payment system rates for local wages.

HCFA should develop an HHA-specific wage index. Periodically updating the wage index to reflect changes in HHA wage rates, however, may or may not be easily accomplished. Much will depend on the quality of the wage and hour data that HHAs submit. If HHAs supply accurate data, the wage index could be updated for FY 2002; if not, HCFA must quickly resolve reporting problems to eliminate this source of inaccuracy.

Measuring geographic variation in labor costs for HHAs is part of a larger problem. New measures are needed to account for differences in labor costs to implement each of Medicare's new prospective payment systems, including the payment system for Medicare+Choice plans. Obtaining more accurate and timely labor price data for occupations employed by all

health care providers may be more efficient and accurate as it would preclude separate data collection for each type of provider.

## Improving payments for skilled nursing facility care

Skilled nursing facility (SNF) payments have been among the fastest-growing components of Medicare spending, increasing 36 percent between 1987 and 1997. In response to these increases, Congress mandated a PPS under which SNFs are paid a single case-mix adjusted per diem rate for each patient. The rate covers all routine, ancillary, and capital costs, and the cost of Part B services provided during a beneficiary's Part A stay. The Congress enacted changes to the PPS because of concerns about payment inequities.

PPS began for each SNF on or after July 1, 1998, according to its cost reporting period. Under the SNF PPS, rates are case-mix adjusted according to the Resource Utilization Groups, Version III (RUG-III) classification system based on data from the Minimum Data Set (MDS) Version 2.0, originally designed to assess nursing facility residents. RUG-III assigns beneficiaries to one of 26 groups to account for the relative resource use (staff time) of different types of patients.<sup>9</sup> The groups include two types of patients: those who require rehabilitation services, and non-rehabilitation patients classified as extensive services, special care, or clinically complex (Table 3-3).

#### Problems with the current case-mix classification system

The RUG-III classification system reflects treatment costs associated with the time that providers spend furnishing nursing and therapy services. However, patients vary in their uses of other ancillary services and supplies; currently, these differences are reflected in the payment system's weights only in that they are correlated with the use of nursing services.<sup>10</sup> As a result, patients who

9 RUG-III has 44 groups. Patients in 26 groups are presumed to meet SNF level of care criteria, at least initially. Many patients in the remaining 18 RUG-III groups would not meet Medicare coverage criteria because these categories often are used to describe Medicaid patients.

10 Examples of other ancillary services are pharmaceuticals, respiratory therapy, infusion therapy, lab tests, imaging services, and transportation. Supplies include medical equipment, including prosthetics.

**TABLE  
3-3**

**RUG-III classification groups consistent with Medicare coverage criteria**

Patient category		Number of RUG-III groups	Examples of patients included in a category
Rehabilitation	Ultra high	3	Patients requiring any combination of PT, OT, or ST.
	Very high	3	
	High	3	
	Medium	3	
	Low	2	
Non-rehabilitation	Extensive services	3	Patients with an ADL score of at least 7 and who meet at least one of the following criteria: parenteral feeding, suctioning, tracheotomy, ventilator/respirator.
	Special care	3	Patients with an ADL score of at least 7 and who require special care (such as patients with multiple sclerosis, quadriplegia, cerebral palsy, aphasia, pneumonia, dehydration, or those requiring tube feedings or receiving radiation treatment).
	Clinically complex	6	Patients with burns, coma, septicemia, hemiplegia, diabetes with daily injections, foot wounds, or those requiring dialysis or chemotherapy.

Note: Within each category, patients are classified based on functional status (measured by an index of activities of daily living), and the number and types of services used. RUG-III (Resource Utilization Group, Version III), PT (physical therapy), OT (occupational therapy), ST (speech therapy), ADL (activity of daily living).

Source: MedPAC summary of definitions in Table 2.C., Federal Register, May 12, 1998, Vol. 63, No. 91, p. 26262.

require rehabilitation therapy are not adequately distinguished from those who require both therapy and nontherapy ancillary services because of complex medical conditions. This has resulted in excessive RUG-III payments for patients who need relatively few nontherapy ancillaries and inadequate payments for those needing relatively high levels of these ancillaries.

HCFA-sponsored research on this issue found that average nontherapy ancillary charges were much higher for patients in the extensive services groups than for others, including those in the RUG-III rehabilitation categories (White et al. 1999). Further, it found that while payment rates are the same whether patients qualify for only one of the top three rehabilitation categories or also for extensive services or special care, average costs were significantly higher for patients in the latter category.

Failure of the current case-mix classification system to account for patients who require multiple types of services means that payments are not appropriately allocated and threaten access to SNF care for such patients. As discussed in Chapter 2, interviews conducted with discharge planners revealed that, compared with patients needing short-term rehabilitation, those requiring extensive services were more difficult to place in SNFs.

**Interim and longer-term solutions for improving skilled nursing facility payments**

HCFA's analysis, combined with industry concerns about adequacy of payment, led the Congress to make immediate changes to payments for SNF services. Among the SNF-related changes, the BBRA mandated a 20 percent increase in per diem payments for 12 RUGs covering medically complex cases in the extensive services, special care, and clinically

complex categories, as well as three select rehabilitation RUGs.

The Commission believes that these increases are only temporary measures and do not solve the underlying problems inherent in the classification system. Although these higher payments may help offset some provider expenses, they will not necessarily improve beneficiary access to SNF services. The highest reimbursement rates continue to be concentrated in rehabilitation categories that typically do not include the most medically complex patients.

HCFA is considering longer-term solutions that will better reflect patient service needs and the costs of providing those services. The agency is currently investigating the variation in costs within each RUG to gain a better understanding of the adequacy of the PPS for drugs, respiratory, and other nontherapy ancillary costs, and the MDS items that may predict variance in nontherapy ancillary charges.

Although most attention has focused on three RUG-III patient classification categories—rehabilitation, extensive services, and special care—all are being evaluated. HCFA’s proposed modifications will be published this spring, with implementation of the changes anticipated in October 2000.

Over the next few months, MedPAC will analyze SNF use patterns and changes in the industry, examining the types of patients admitted to SNFs and addressing whether high-acuity patients received services in SNFs during the early months of the PPS phase in. We hope this research will contribute to a better understanding of SNF patients and to improving SNF payment methods.

### **Containing costs while paying fairly for outpatient therapy services**

As it did in other areas, the BBA made substantial changes to payments for outpatient therapy. These changes modified the unit of payment for most outpatient therapy settings and the payment rate for all settings. Congress eliminated cost-based payments for outpatient therapy and required payments to be based on the Medicare physician fee schedule.<sup>11</sup>

### **Choosing the appropriate unit of payment**

The BBA effectively changed the unit of payment for beneficiaries who use outpatient therapy services frequently by establishing two annual \$1,500 per beneficiary caps: one for physical therapy and speech language pathology services and another for occupational therapy services. The caps applied to beneficiaries using therapy furnished in all settings other than hospital outpatient departments (OPDs). After claims by patient advocates and providers that beneficiaries were being harmed by the outpatient therapy caps, the BBRA imposed a two-year moratorium on the caps, effective in 2000.

In January 2001, HCFA is required to report on its recommendations for establishing a revised payment policy based on diagnostic groups, including functional status.

Choosing an appropriate unit of payment requires defining the product, determining whether effective product classification systems and related data are available, and deciding whether to bundle services furnished by complementary settings. Little is known to inform the decision about the appropriate unit of payment for outpatient therapy. Preliminary analyses of beneficiary characteristics and service use by setting suggest distinct subpopulations of outpatient therapy users. In recommending a revised payment policy, HCFA will need to consider whether it is possible to define the same product and bundle of services for all users.

### **Developing an appropriate classification system**

An appropriate classification system distinguishes among patient care products and among beneficiaries expected to require different amounts of provider services. An effective classification system uses variables that are reasonably objective and easy to monitor. Beneficiary characteristics that cannot be easily manipulated—such as diagnoses or other clinical information, rather than service use—are preferred classification variables.

Preliminary analyses show that outpatient therapy users receive services in varied settings and that average payments differ widely by setting. For example, hospital OPDs provide outpatient therapy to more than 50 percent of users, but account for only 25 percent of the payments (Table 3-4). OPD users are exempt from the caps, but use the smallest average amount of therapy. Conversely, in 1996 approximately one-third of the beneficiaries receiving outpatient therapy from SNFs, rehabilitation agencies, and comprehensive outpatient

rehabilitation facilities would have exceeded one of the caps.<sup>12</sup>

Administrative data on beneficiary characteristics by setting suggest that at least two different patient populations, and possibly three, receive outpatient therapy. Nursing facility residents receiving outpatient therapy from SNFs are older and more likely to be female, poorer, and to have neurological diagnoses than users receiving therapy in ambulatory care settings. Their therapy also costs 2.5 times as much as that of ambulatory therapy users. However, beneficiary clinical information is needed to gain more insight into differences among outpatient therapy users and the settings they use. HCFA will need to consider such information when making its recommendations to the Congress on the revised payment system.

### **Developing a prospective payment system for care in inpatient rehabilitation facilities**

The BBA required HCFA to establish a case-mix adjusted PPS for inpatient rehabilitation care, effective October 1, 2000. MedPAC recommended that HCFA use the Functional Independence Measure-Functional Related Groups (FIM-FRGs) for the payment system (MedPAC 1999c). In the BBRA, the Congress required that the unit of payment be based on discharges and that HCFA use the FIM-FRG. Because HCFA is expected to issue a regulation on the inpatient rehabilitation PPS in spring 2000, MedPAC will withhold comment until the regulation is issued.

### **Monitoring the quality of post-acute care**

As significant changes in Medicare’s payment systems get under way, policy interest turns to how beneficiary care is affected by the incentives created by those new payment systems. The move to prospective payment—in progress or

11 Both of the BBA provisions—fee schedule reimbursement and dollar-based coverage limits—have been in effect for several years for services furnished by therapists in independent practice.

12 In nursing facilities, the cap applied only to beneficiaries who were residents but not covered by Part A for a SNF stay.

**TABLE  
3-4**

**Distribution of outpatient therapy users, payments, and average payments, by setting, 1996**

Outpatient therapy setting	Percent of users	Percent of payments	Average annual physical/speech therapy payment	Average annual occupational therapy payment
Hospital outpatient department	58%	24%	\$349	\$356
Rehabilitation agency	25	39	1,619	1,250
Comprehensive outpatient rehabilitation facility	4	8	2,029	1,686
Skilled nursing facility	13	29	1,549	1,304

Source: MedPAC analysis of HCFA 1996 outpatient claims data.

planning stages for many types of post-acute care services—provides a strong motive for creating systems to monitor the quality of care that beneficiaries obtain. Payment systems that reward efficient providers could cause quality problems if providers adopt cost-containment strategies that inappropriately reduce the intensity, duration, or skill level of the services they furnish. If payment levels under the new systems are set too low, either overall or for certain types of patients, access problems may result.<sup>13</sup>

Quality monitoring systems could help ensure that payment systems are designed correctly and that providers are responding appropriately to the systems' incentives, and could also be used to accomplish several other important objectives. They could assist in tracking trends over time, or provide an early warning of impending problems in quality. Furthermore, the information generated could be used in beneficiary education programs or in efforts to safeguard or improve beneficiaries' care. Attaining any of these ends requires routine, systematic measurement of health care quality.

The move to pay prospectively for post-acute care has provided MedPAC with an opportunity to address issues in

monitoring the quality of care provided in skilled nursing facilities, rehabilitation facilities, long-term hospitals, and beneficiaries' homes. At present, Medicare's capability to monitor the quality of care provided in these settings is very limited, although HCFA has taken a number of steps to generate information on the quality of care furnished by certain types of post-acute care providers. The Commission supports the intent of HCFA's efforts, but has a number of recommendations for enhancing or redirecting them:

- The Commission would like to see quality monitoring systems developed for all types of post-acute care providers, and the information generated by those systems used to safeguard and improve the quality of beneficiaries' care.
- The Commission believes that quality monitoring efforts should be closely coordinated across different types of post-acute care providers. Medicare should employ core measures that can be used to compare quality across post-acute care settings, in addition to a well-chosen, minimal set of supplemental measures geared toward types of care uniquely provided in particular settings.

- The Commission encourages the Secretary to invest in developing better measures of post-acute care quality. Measures of appropriate service use and those that can be used to compare outcomes across different sites of service are notably lacking. Methods for making adjustments to account for differences in patient acuity when comparing quality across providers must also be defined.
- The Commission believes that post-acute care data collection efforts need improvement. The Secretary should take steps to increase the utility of the patient assessment data currently collected for quality monitoring and payment purposes, while reducing the burden on providers and beneficiaries. To minimize reliance on patient assessment data, she should assess the use of other types of information for quality monitoring purposes, such as information from patient surveys, medical records, or claims.

This section of the chapter outlines the rationale for the quality monitoring objectives recommended by the Commission, and then discusses the need for coordinating setting-specific monitoring systems to increase the utility of monitoring efforts. It then considers the types of quality measures needed for measuring post-acute care quality, and concludes with an analysis of how to improve data reporting requirements.

### **Defining objectives for monitoring post-acute care quality**

MedPAC believes that policymakers should clearly articulate their objectives for monitoring post-acute care quality to guide the development of monitoring systems that can ultimately attain them. Perhaps the most important short-term objective is to address policymakers' concerns about the impact of prospective payment on the quality of post-acute care. However, data-driven monitoring systems are also attractive in that they offer the

<sup>13</sup> See Chapter 2 for a review of the evidence on the effects of payment changes mandated by the BBA on beneficiaries' access.

potential to enhance Medicare's ability to safeguard the quality of care beneficiaries receive, assist providers in improving the quality of care, and help patients make informed decisions.

The Secretary currently has work under way to develop quality monitoring systems for at least two types of post-acute care providers: home health care agencies and skilled nursing facilities. However, the work in progress differs in terms of stated objectives and system design.

### **RECOMMENDATION 3F**

**The Secretary should establish systems for routinely assessing the quality of post-acute care and should use the information these systems generate to:**

- **evaluate the effects of new payment systems on quality of care,**
- **focus quality assurance activities,**
- **facilitate continuous quality improvement, and**
- **promote informed patient decisionmaking.**

#### **Assessing the effects of prospective payment on quality of care**

Although policymakers are concerned about the potential effects of prospective payment on quality, Medicare's capability to assess the effects of those payment changes now in progress or soon to be initiated is very limited. Such capability is necessary; otherwise, policymakers must rely solely on anecdotal information and input provided by interested parties, which provide an inferior basis for decisionmaking.

HCFA has announced plans to evaluate the effects on quality of some, but not all, of the new post-acute care PPSs. As directed by the BBA, the agency has set

up a process to evaluate the effects of the new SNF PPS on the quality of skilled nursing care beneficiaries receive and to ensure that beneficiaries obtain appropriate services under the system.<sup>14</sup> Although MedPAC believes that this process represents a reasonable use of existing resources, limitations in those resources cast doubt on the system's potential effectiveness in uncovering changes in beneficiary care caused by changes in payment methods or amounts. Furthermore, it is unclear whether the agency plans to assess the effects on quality of forthcoming prospective payment systems for home health agencies, rehabilitation facilities, or long-term hospitals. The Congress has not issued a mandate to do so, nor has HCFA indicated that it intends to undertake such an assessment.

HCFA could use the SNF quality medical review process as a model to evaluate the effects of new payment systems for other types of post-acute care as they are initiated. In the home health area, HCFA could use OASIS data collected before and after implementation of the PPS to evaluate whether certain health care outcomes change, following the change in payment. Developing the capacity to evaluate the effects of future payment systems for long-term hospitals and rehabilitation facilities would require additional planning on HCFA's part. Because the agency does not currently collect patient assessment data (comparable to MDS or OASIS) from long-term hospitals or rehabilitation facilities, HCFA must either begin to collect such data before implementing the PPS or use other types of information to assess quality before and after the payment changes occur.

#### **Using quality monitoring systems to fulfill other objectives**

MedPAC's recommendation to establish routine quality monitoring systems for post-acute care is motivated only partly by the shift to prospective payment for these services. The Commission has previously

noted the need to establish systems for monitoring, safeguarding, and improving the quality of all types of care Medicare beneficiaries receive (MedPAC 1999b). Such efforts are needed in light of the findings of the Institute of Medicine and the President's Advisory Commission on Consumer Protection and Quality, which have concluded that measurable quality problems exist in all health care settings under all types of payment arrangements (Chassin et al. 1998, Quality Commission 1998).

Monitoring the nature and extent of quality problems is necessary, but will not alone be sufficient to address any problems identified. As MedPAC noted in our June 1999 report to the Congress, quality monitoring is a means of developing information that can be used for a variety of purposes. Whether and how that information is used determines the extent to which monitoring affects quality of care (MedPAC 1999b).

To affect quality, HCFA must develop valid and reliable information on quality, use that information in administering the Medicare program, and assist beneficiaries and providers in using the information appropriately. However, not all types of information serve all purposes equally well, and data collection places burdens on health care providers and beneficiaries that could reduce resources available for care. Therefore, MedPAC believes it is critical that HCFA be parsimonious in identifying the key information necessary for quality monitoring purposes, and that every effort be taken to ensure that such information is collected efficiently.

In addition to evaluating the effects of payment changes, MedPAC supports developing routine quality monitoring systems to provide information for three purposes. First, information on quality should be used to strengthen existing quality assurance mechanisms. For example, findings could be used by survey and certification agencies to target oversight efforts on particular providers or quality issues.

<sup>14</sup> The so-called quality medical review process focuses on the appropriateness and effectiveness of patient care, rather than the accuracy and validity of SNF claims. HCFA's fiscal intermediaries also conduct medical reviews of PPS claims, which involves verifying the level of services billed by the facility, drawing upon MDS data or medical records.

## Quality medical review process for skilled nursing facility care

As required by the Balanced Budget Act, the Health Care Financing Administration (HCFA) has initiated a quality medical review process to evaluate the effects of the prospective payment system (PPS) on quality and access to skilled nursing facility (SNF) care, and to ensure that beneficiaries obtain appropriate services under the new payment system. The initiative involves two components: developing databases for analyzing changes in SNF quality, and testing state-level SNF quality monitoring, assurance, and improvement activities.

For the first component of the initiative, HCFA awarded a two-year contract to PRO-West, the Washington state peer review organization (PRO), to merge components of existing databases containing information pertinent to SNF care quality and, through analysis of this information, to identify changes in care since implementation of the PPS. Key data include:

- Medicare and Medicaid billing data;
- the Minimum Data Set (MDS), patient assessment data that all certified nursing homes must collect and report; and

- data from the Online Survey, Certification, and Reporting System, which documents information about facilities collected by state survey agencies as part of annual licensing and certification review procedures.

The second component of HCFA's initiative is a two-year pilot test of the ability to develop data-driven, state-level SNF quality monitoring systems to track the effects of PPS on quality and access, and to implement a cooperative, cross-contractor approach to assessing and improving the quality of SNF care. This five-state pilot test involves coordinated efforts of the PROs, state survey agencies, and fiscal intermediaries. Efforts in three of the five states also include the state Medicaid agencies, in an attempt to examine trends in care for longer-stay dually eligible patients.

In the course of the pilot project, HCFA hopes to address several questions:

- Does the MDS help target SNF quality of care problems (in addition to the long-term care quality issues it was designed to address)?
- Can program integrity, quality of care, and medical review contractor

roles be improved by coordinating their activities?

- Is there a role for the PROs to play in promoting quality improvement in SNFs?

HCFA has created a technical expert panel to assist in identifying clinical conditions that might be adversely affected by the new SNF payment system and which could potentially be measured using available data. In accordance with the panel's recommendations, the state pilot project teams are focusing their monitoring efforts in three areas. First, they will monitor the outcomes of rehabilitation care for patients with hip fracture, stroke, or pneumonia—chosen because each has a large volume of frequently occurring admitting diagnoses for elderly nursing home admissions. Using MDS data, the teams will evaluate rehabilitation patients' functional improvements between assessments. Second, they will monitor average lengths of stay, emergency room visits, and rehospitalization rates for SNF patients. Third, the teams will test, for short-stay SNF care, the use of a set of quality indicators developed to measure the quality of care provided to long-term nursing home residents. ■

Second, such information should also be used in quality improvement efforts, such as those developed and managed by Medicare's peer review organizations. This requires generating information that providers can use to compare their performance levels with benchmarks derived from standards of care or the performance of peers. Following an intervention, such as provider education or redesign of a delivery system process, performance is measured again.

Finally, information derived from quality monitoring efforts should be used to assist beneficiaries in considering quality when choosing among providers. Although few consumers use this type of information now, some experts believe demand for this information will grow as consumers gain familiarity with it and as the content, presentation, and delivery improve.<sup>15</sup> In addition, the sentinel effect associated with publicizing certain information may provide incentives for quality improvement.

For home health care and skilled nursing facility care—but not yet for long-term hospital care or rehabilitation facility care—HCFA has efforts under way that will allow the agency to routinely measure quality and use that information for quality assurance and quality improvement purposes (see text boxes, p. 64 and p. 65). The agency also recently established an Internet site to help potential nursing home patients compare the quality of care these facilities provide. The Web site ([www.medicare.gov/nursing/home.asp](http://www.medicare.gov/nursing/home.asp)) provides descriptive

<sup>15</sup> See MedPAC's June 1999 Report to the Congress for a review of the evidence on health care consumers' use of information on quality.

information and data on the number and type of deficiencies found in the most recent program certification survey. However, the site does not include focused information on the quality of skilled nursing care.

### **Coordinating monitoring efforts across sites of service**

Because issues in the quality of post-acute care include those common to different settings and those unique to specific sites of care, coordinating quality monitoring systems for different types of providers would maximize the utility of the information they generate. Rather than develop quality monitoring for each type of post-acute care provider independently, the Commission believes that systems should be designed to provide a limited amount of key information relevant to the quality of care furnished in a particular setting and a limited amount of additional information with which to compare processes and outcomes of care provided in different post-acute settings. Information used in making such comparisons must be risk adjusted to control for differences in patient acuity across different settings. System design should also consider future interest in evaluating the quality of care furnished in multiple-provider episodes of post-acute care.

### **RECOMMENDATION 3G**

**The Secretary should coordinate systems for monitoring post-acute care quality across all service settings to:**

- **assess important aspects of the care uniquely provided in a particular setting,**
- **compare certain processes and outcomes of care provided in alternative settings, and**
- **evaluate the quality of care furnished in multiple-provider episodes of post-acute care.**

Although HCFA is developing quality monitoring systems for evaluating care

## **Outcome-based quality improvement for home health care**

HCFA is developing a data-driven quality monitoring system for use in home health quality improvement and quality assurance programs. The system may also eventually be used for consumer information purposes. The outcome-based quality improvement system for home health care, in development for a number of years, is based upon analysis and dissemination of information on patient outcomes using patient assessment data from the Outcome and Assessment Information Set (OASIS).

A three-year national demonstration of the use of OASIS in a quality improvement program, involving 50 home health agencies, was completed in September 1999. Although no formal evaluation of the demonstration was commissioned, demonstration contractors reported they could generate quality reports using the data submitted by agencies participating in the demonstration, and that agencies achieved quality improvements, such as reductions in the rate of

rehospitalizations, over the course of the demonstration period.

HCFA has initiated a pilot test of the use of peer review organizations (PROs) to support home health agencies in meeting Medicare's new participation requirement to improve patient outcomes. Under this project, a PRO is to work with home health agencies in the region it serves to help identify and implement interventions designed to improve quality, interpret outcome reports, provide training of staff, and disseminate information on best practices. Depending in part on the success of this pilot test, HCFA may seek to expand the purview of the PROs to include home health care on a permanent and formal basis.

HCFA also plans to develop agency-specific outcome reports for use by the state survey agencies in targeting agencies for review and in identifying problems for investigation in the course of review. ■

provided by SNFs and home health agencies, both the Medicare program specifically and the health system in general are ill-equipped to compare the care provided in different post-acute care settings and to evaluate the care patients receive when it involves more than one type of provider. Ongoing rapid evolution of the health care delivery system intensifies the need for, and potential benefit of, developing this capacity. This limitation is particularly important as Medicare begins to create alternatives to the traditional Medicare program such as the Program of All-Inclusive Care to the Elderly (PACE) and, potentially, bundling payments for a post-acute care episode that could encompass care provided by multiple provider types.

PACE exemplifies the problems with developing uncoordinated quality monitoring systems for different sites of service. PACE is designed to offer integrated delivery and financing of primary, acute, and long-term care services for a frail (nursing-home eligible) population. Because 18 of the 25 PACE sites are licensed as home health care agencies in the states in which they operate, these sites are required to collect and submit OASIS data.<sup>16</sup> Furthermore, HCFA has sponsored the development of a patient assessment data collection tool that could address PACE patient care issues. Although the PACE instrument is expected to have an outcomes-oriented focus, similar to that of OASIS, the extent to which these tools will be comparable is unknown.

<sup>16</sup> The other sites are exempt from HCFA's patient assessment data reporting requirements. However, according to the National PACE Association, PACE sites continue to collect and submit patient assessment data using the formerly required PACE data set, because it is required to maintain private accreditation status.

## Developing needed measures of post-acute care quality

A critical limitation in the development of post-acute care quality monitoring systems is in the availability of quality measures. Investing in developing and validating quality measures is needed to provide a basis for assessing important aspects of post-acute care quality.

### RECOMMENDATION 3H

#### **The Secretary should sponsor the development of post-acute care quality measures needed to monitor outcomes—such as beneficiary health and functional status—and the appropriate use of services.**

The dearth of indicators of post-acute care quality that can be monitored with regularly collected data represents a considerable problem. Measures of home health outcomes that use OASIS data have been tested and validated. Quality indicators for use with the MDS also have been developed, but they focus on issues relating to long-term nursing home care. HCFA is in the process of testing—through the pilot project of the SNF quality medical review system—whether these indicators also provide meaningful information about the quality of skilled nursing care. The extent of patients' functional improvements resulting from rehabilitation care can be measured using the Functional Independence Measure (FIM), a patient assessment instrument, but those data are not collected by HCFA.

Home health care quality measures based on information in OASIS were developed by researchers at the Center for Health Services and Policy Research at the University of Colorado through projects co-funded by HCFA and the Robert Wood Johnson Foundation. The measures, which form the basis of HCFA's forthcoming outcome-based quality improvement system for home health, are of three types: those designed to measure

changes in health status; those that measure changes in behavior, emotions, or knowledge that can influence health status; and measures of health care use (such as acute care hospitalization) that serve as a proxy for outcome changes. To calculate these measures, patients are grouped in one of 25 quality indicator groups, which are designed to provide relatively homogeneous classifications based on diagnosis, requirements for specialized care, and functional status.

With the focus on outcome measures in HCFA's forthcoming home health quality measurement system, the agency will not directly measure whether underuse of needed care results from inappropriate responses to the PPS incentives for increased efficiency. Underuse may or may not be reflected in inferior outcomes of care, depending on the sensitivity of the particular measures.

HCFA also sponsored the development of 24 quality indicators that use MDS data to provide information on the quality of nursing home care at either the individual resident of facility resident population levels. Developed by the Center for Health Systems Research and Analysis at the University of Wisconsin–Madison, the measures document the extent to which patients have certain conditions (such as symptoms of depression) or are recipients of certain care (such as tube feeding). Two of the measures describe the extent to which the patient's condition improved or worsened over the measurement intervals. Some of the measures are calculated separately for patients deemed at high risk for a particular condition (for example, incontinence rates are calculated separately for those who are severely cognitively impaired), while others exclude certain residents (such as comatose patients). These methods provide a means of accounting for differences in the resident population across different facilities.

The need for additional measures of the clinical quality of SNF care depends on HCFA's findings as to whether the long-

term care quality indicators derived from MDS data also apply to SNF patient care, and on whether the MDS provides adequate data for assessing functional outcomes of rehabilitation patients. At present, many SNFs use the FIM with their rehabilitation patients for this purpose, but these data are not currently collected by HCFA.<sup>17</sup> If HCFA finds that the long-term care quality indicators it is testing are not useful measures of SNF care quality, the agency might seek to determine whether more appropriate measures of SNF quality could be derived from MDS data. Ultimately, the agency could find that MDS data do not provide the information needed to monitor the quality of SNF care.

Measures of whether beneficiaries receive appropriate care could provide additional assistance in interpreting any declines in service volume that result from PPS implementation. MedPAC is sponsoring a project to assess the feasibility of developing indicators of beneficiaries' use of appropriate SNF care that draw upon routinely available administrative data. In response to a BBA mandate that the Secretary establish normative guidelines on the frequency and duration of home health services needed by different beneficiaries, HCFA funded a project that could potentially serve as a basis for further work in this area. However, this work is likely to focus on identifying thresholds for overuse of services, rather than underuse, because the Congress couched its mandate in the context of developing standards for denying inappropriate claims.

HCFA has also sponsored work by Abt Associates to identify quality measures that could be used across inpatient post-acute care settings. No report on the project has been issued, but HCFA staff report that the agency's contractors found that very few post-acute quality measures have been developed and even fewer have been validated. The current phase of the project funds the development of new measures that could be used with existing data.

17 In our March 1999 Report to the Congress, MedPAC recommended that the Secretary conduct a demonstration to assess the potential of the FIM-FRG classification system in predicting the resource use of intensive rehabilitation patients in SNFs.

In developing new measures of post-acute care quality, the Secretary can draw upon not only the resources and expertise of HCFA, but also the resources of other agencies with relevant mandates. Among the agencies that could play a role is the Agency for Healthcare Research and Quality (AHRQ), formerly the Agency for Health Care Policy and Research. In recent legislation renaming and reauthorizing AHRQ, the Congress recognized the importance of funding research and development work to measure, safeguard, and improve health care quality.

### Improving data for post-acute care quality measurement

The Commission has a number of concerns relating to the collection of patient assessment data from post-acute care providers. Lack of coordination in the design of the instruments, and in their use by Medicare, limits the utility of the information they furnish. Furthermore, the subjective nature of these data is an issue, particularly because they now form (or are expected to form in the future) the basis for payments and quality measurement in post-acute care settings. Finally, MedPAC is concerned about the scope of the data collected, which seems to place an unnecessarily large burden on health care providers and post-acute care patients.

#### RECOMMENDATION 31

**The Secretary should review all post-acute care data collection requirements. Each item should have an explicit rationale, and only information needed for accurate billing, risk adjustment, or quality measurement should be required.**

HCFA now requires patient assessment data collection in some, but not all, post-acute settings. Medicare requires home health agencies and SNFs to fulfill OASIS and MDS data collection and reporting requirements, respectively. Although in some cases, these providers may be providing similar services to patients with similar characteristics, the data HCFA

collects on these patients and their care differ significantly. No comparable reporting requirements have been developed for rehabilitation facilities or

long-term hospitals, although they are likely to be established as HCFA instigates new payment systems for these providers.

### Patient assessment data collection tools

Since June 1998, HCFA has required nursing homes to collect and submit patient assessment data in a standardized format known as the Minimum Data Set (MDS).<sup>18</sup> The Resident Assessment Instrument that serves as the basis for collecting MDS data was originally developed as a comprehensive care planning tool, but the information it generates is now also used to classify patients for determining SNF payments, as well as for measuring the quality of long-term nursing home care. The current version of the MDS includes approximately 300 elements grouped in 18 domains. Assessments of SNF residents are required to be conducted periodically by a clinician (nurse or therapist). The reliability and validity of MDS items has been extensively studied (Won et al. 1999). For most items, researchers documented high levels of validity and reliability (interrater and test-retest), but a few areas, such as depression and incontinence, have proved problematic.

HCFA established requirements for home health agencies to collect and report standardized patient assessment and outcome data as of July 1999. The Outcome and Assessment Information Set (OASIS), which consists of 79 items in its current iteration, collects a variety of information that relies on the collector's assessment of patient capacity as well as on patient responses. OASIS data are collected by a nurse or therapist for each patient at the start of care, every 60 days thereafter for the duration of treatment, and at discharge. Home health agencies report the data to their state survey and certification agencies, which in turn report the data to a central repository maintained by HCFA.

Unlike SNFs and home health agencies, rehabilitation facilities are not currently required by HCFA to collect or submit patient assessment data. Many rehabilitation facilities assess their patients using a relatively short, outcomes-oriented measurement known as the Functional Independence Measure (FIM). Some facilities report these and other data to the Uniform Data System for Medical Rehabilitation, a national repository. The FIM consists of items geared toward measuring functional capacity in six domains: communication, social cognition, locomotion, transfers, sphincter control, and self care. Studies of the FIM have found good interrater reliability (Hamilton et al. 1994).

HCFA may or may not require submission of FIM data by rehabilitation facilities in the future. The agency plans to use the Functional Independence Measure-Functional Related Group (FIM-FRG) system for classifying patients for payment under the PPS; therefore, HCFA will need to collect patient-level data of the type required to generate FIM-FRG classifications. However, the Minimum Data Set-Post-Acute Care (MDS-PAC), which HCFA developed and is currently refining based on tests of use in alternative inpatient post-acute care settings, may also provide information needed to generate FIM-FRG classifications, and could therefore potentially be required instead. HCFA and the rehabilitation care community have longstanding disagreements over the extent to which various iterations of the MDS-PAC have incorporated the FIM. ■

<sup>18</sup> The MDS had been in use in long-term care facilities since at least 1991, however.

**TABLE  
3-5**

**Characteristics of selected patient assessment data sets**

<b>Data set</b>	<b>Patient assessment instrument on which based</b>	<b>Purpose for which developed</b>	<b>Type of care designed to address</b>	<b>Medicare payment usage</b>	<b>Quality measurement application(s)</b>	<b>HCFA reporting requirement</b>
Minimum Data Set	Resident Assessment Instrument	Care planning	Long-term care	SNF	Long-term care; applicability to SNF care being tested	NF and SNF
Uniform Data System for Medical Rehabilitation	Functional Independence Measure	Assessing functional status	Rehabilitation care	Not currently; could be used for rehabilitation facility payments in future	Rehabilitation care	No
Minimum Data Set—Post Acute Care	Incorporates items from the Resident Assessment Instrument and the Functional Independence Measure	Collecting core information across sites of service	Inpatient post-acute care sites (SNF, rehabilitation facilities, and long-term hospitals)	Not currently; could be used for inpatient post-acute care payments in future	Unknown	No; potential future requirement for SNF, rehabilitation facilities, and long-term hospitals
Outcome and Assessment Information Set	Not applicable	Measuring quality	Home health care	Home health agencies	Home health care	Home health agencies

Note: NF (nursing facility), SNF (skilled nursing facility).

Source: MedPAC analysis of information from several sources.

Patient assessment data collection tools in current or potential future use among post-acute care providers are highly diverse, varying in terms of the purpose for which they were designed, the types of care they were designed to address, the types of providers that use them, and the payment, quality measurement, care planning, or other purposes for which they are used (Table 3-5).

The information collected by these tools is also quite different, not only in terms of the types of information collected, but also in the way similar items are framed. The items in the MDS and OASIS relating to patient bathing status provide an illustration of such differences. The MDS and OASIS items differ dramatically in how they define bathing, what about bathing is of interest (documenting what actually occurs or the perceived ability to undertake the

activity), and the number and nature of response codes. The MDS defines the bathing item as “how resident takes full-body bath/shower, sponge bath, and transfers in/out of the tub/shower (exclude washing of back and hair),” while OASIS defines bathing as “patient ability to wash entire body (exclude grooming, washing face and hands only).” The MDS provides 11 response codes to the bathing item; 6 are for coding patients’ bathing self-performance and 5 for coding staff-supported bathing activity. The OASIS offers seven response codes that range from full patient independence to complete dependence on another person for bathing.

The lack of comparability across post-acute patient assessment data collection concerns MedPAC for several reasons. The differences limit the use of the data to make comparisons across settings, even in

cases in which the patients and the care furnished may be comparable in important respects. They also create differential burdens on providers and patients across settings and serve as a limiting factor in moving toward better integration of post-acute care.

MedPAC therefore supports developing and using improved patient assessment data collection tools that use common definitions, items, and data collection methods wherever possible. This can be undertaken, in part, by ensuring that patient assessment instruments used in each setting identically measure functional status, patient conditions, and other items of common interest, and that the instruments use common definitions, terms, and rating scales wherever possible. The Commission would like to see additional steps taken to link information collection requirements to the

type of care being provided, such as rehabilitation care, rather than to the setting in which that care is furnished. The Commission plans to assess whether the forthcoming Minimum Data Set–Post-Acute Care addresses the Commission’s concerns. MedPAC will also be interested in exploring how home health care assessments can be better coordinated with any common data collection efforts for inpatient post-acute care.

MedPAC has concerns about the reliance on patient assessment data for both monitoring quality and paying for post-acute care services.<sup>19</sup> The subjective nature of these data creates opportunities for miscoding, while the payment and monitoring systems provide incentives to do so. For example, the integrity of the OASIS data, which form the future basis of both payment and quality monitoring systems for home health agencies in Medicare, may be affected by the apparent alignment of payment and quality monitoring incentives for providers to classify a patient as being of poor health and functional status for purposes of the initial assessment. Incentives for subsequent patient assessments depend on whether the patient is being discharged—in which case providers face incentives to find improvements to enhance quality measurement results—or is obtaining a 60-day followup, in which case the incentives created by payment and quality monitoring systems oppose one another.

In the short term, HCFA must establish sound processes for assessing and ensuring data integrity, coupled with consequential penalties for abuse, to counteract incentives for miscoding.<sup>20</sup> In the longer term, MedPAC supports reducing the reliance on subjective data for measuring quality and determining payments.

MedPAC calls upon the Secretary to reduce the burden of patient assessment data collection on patients and providers.

First, data collection requirements must be reduced to the bare minimum required to make payments and estimate key quality indicators, including that necessary to classify patients appropriately on the basis of different risk factors for both payment and quality assessment purposes. A second step is to examine whether patient assessment data collection can be reduced by focusing the collection of information beyond that needed for payment on a subset of patients, rather than the full set of patients using post-acute care. (This could potentially be accomplished by the use of sampling methods.) A third step would be to gather information for quality measurement from other sources, reducing the reliance on patient assessment data. For example, patient medical records, patient surveys, and claims might be useful sources of information for measuring certain aspects of quality.

MedPAC acknowledges that changing patient assessment data collection efforts will be challenging. Because the diverse post-acute care payment systems have been based on current patient assessment tools, any transition will likely require a period of dual data collection efforts to ensure that items needed to form the basis of payment are collected under the new systems.

---

### **Refining payments for inpatient care in prospective payment system hospitals**

---

Effective FY 1984, Medicare replaced the cost-based methods it used to pay hospitals for inpatient care with an inpatient PPS. Despite a variety of subsequent modifications, the system’s main features have remained remarkably stable. In this section, we consider further refinements to several elements of the PPS and make recommendations that the

Congress or the Secretary of Health and Human Services could adopt to strengthen the effectiveness of Medicare’s hospital payment policies.

In our work this year on refining payments for care in hospitals, we have not attempted a comprehensive review of all elements of the inpatient PPS. Instead, we have focused on selected policy issues concerning four components of the payment system:

- Should Medicare continue to set separate operating and capital payment rates, or combine them into a single comprehensive payment rate per discharge?
- Could Medicare substantially improve payment accuracy by refining the diagnosis related groups (DRG) patient classification system, the methods it uses to measure expected relative resource requirements among DRGs, and its method for financing outlier payments for extraordinarily expensive cases?
- Is Medicare’s expanded transfer payment policy appropriate, and should it be extended from 10 DRGs to all DRGs?
- How can Medicare refine its policies for making additional payments to providers that serve a disproportionate share of low-income patients to improve equity among hospitals?

The first issue concerns the desirability of combining Medicare’s separate payments for the operating and capital components of inpatient care. Originally, PPS payment rates covered only the operating costs of inpatient care. Capital costs—mainly depreciation, loan interest, and rent—were reimbursed based on each provider’s incurred costs. In FY 1991, capital

---

19 Using the same data source for quality monitoring and defining payment classification may provide valuable incentives in the long-term care arena, however. Incentives to code patients as sick and dependent to maximize payment may be offset by concerns about the increased risk of poor findings from quality monitoring.

20 HCFA has contracted with the Center for Health Services and Policy Research at the University of Colorado to develop a program for ensuring OASIS integrity. The program is expected to rely on auditing OASIS data, checking patient assessments against medical records, and conducting concurrent assessments. The contract also involves developing algorithms that can be used with claims to identify instances of potential miscoding for focused review. The agency also has a contract with Abt Associates to develop processes and protocols for ensuring MDS data accuracy, the results of which are expected this year.

prospective payment rates were introduced with a 10-year phase-in period. The end of the transition raises the issue of whether Medicare should continue to make separate operating and capital payments.

The second issue concerns the desirability of refining Medicare's inpatient classification system and its relative weights. HCFA annually sets separate payment rates for about 500 distinct types of cases, as defined by the DRG patient classification system. These per discharge payment rates are the product of two components: the hospital's base operating or capital payment amount per discharge, and the relative weight for the patient's DRG, which measures the expected relative costliness of a typical case in that category compared with the average cost for all Medicare cases. The relative weights thus determine how much payment rates vary among distinct types of cases.

The DRG definitions and the methods used to calculate relative weights have important limitations that affect payment accuracy at the case level. MedPAC is evaluating several potential refinements intended to address this problem. In this section, we report preliminary findings from our analysis.

Payments for some cases are also adjusted to accommodate variations in costs that reflect unusual differences in the care furnished. The outlier policy provides additional payments to hospitals when their costs for a case are extraordinarily high compared with the regular PPS payment. Outlier payments help defray part of the financial losses hospitals otherwise would incur in treating unusually severe cases. These payments thus reduce hospitals' financial risks from extraordinary cases, thereby limiting financial incentives to avoid costly patients and ensuring that severely ill beneficiaries continue to have access to high-quality care.

The third issue explores the transfer policy, which reduces payments for some cases when the full course of care normally provided to patients in the same

DRG is only partly furnished in the hospital, with the remainder furnished in another PPS hospital. The BBA expanded the transfer policy to cases in 10 DRGs when the patient is discharged to a PPS-exempt hospital or a post-acute care provider (such as a SNF), or when the patient is discharged with a plan of care to receive related home health services. The law also allowed the Secretary to extend the new policy to other DRGs, raising the issue of whether she should do so.

Medicare also adjusts hospitals' PPS payments to accommodate systematically higher costs of care in teaching hospitals and to partially offset lost revenues for providers serving a disproportionate share of low-income patients. The indirect medical education (IME) adjustment and the disproportionate share hospital (DSH) adjustment are intended to help preserve beneficiaries' access to care in hospitals that often provide high-technology services not widely available elsewhere.

Although MedPAC is exploring potential policy changes that might improve Medicare's payments to teaching hospitals, this work is not yet complete. We plan to continue our analysis over the next few months and publish the findings and related recommendations in a June report on hospital payment policies.

We also have previously recommended ways to make the DSH adjustment more effective while promoting payment equity among hospitals. In considering this fourth issue, we revisit policy questions concerning payment equity and recommend ways to further refine this payment adjustment.

### **Combining payments for operating and capital costs**

Medicare uses prospective payment systems for the operating and capital costs of PPS hospitals. During a 10-year transition to fully prospective capital payment with federal rates—which ends in FY 2001—most hospitals have been paid based on a blend of hospital-specific and federal rates. The Congress should now address the unit of payment for

inpatient hospital services by combining operating and capital payments into a single prospective hospital payment rate.

Separate operating and capital payments are a relic of the era of cost reimbursement for health care, and there is a strong conceptual case for combining them after the end of the transition. Both support services to the same Medicare beneficiaries, and both payment amounts are proportional to the DRG weight of the case. Further, in seeking to approximate market behavior, Medicare's administered prices should follow other industries where prices cover both operating and capital costs. Such a change would simplify the hospital prospective payment system, reduce the costs and complications of maintaining the PPS, and clarify incentives facing hospitals.

### **RECOMMENDATION 3J**

**The Congress should combine prospective payment system operating and capital payment rates to create a single prospective rate for hospital inpatient care. This change would require a single set of payment adjustments—in particular, for indirect medical education and disproportionate share hospital payments—and a single payment update.**

When the Medicare capital PPS was introduced in FY 1992, it was understood that operating and capital payments would be combined in a single prospective payment after the end of the transition in FY 2001. It will be appropriate, at that time, to combine operating and capital payments.

During the transition, hospital capital payments have been a blend of prospective federal rates based on data from all PPS hospitals and prospective hospital-specific rates, based on hospitals' historic costs. The blend will shift from 10 percent federal and 90 percent hospital-specific, in annual 10 percentage point increments, to 100 percent federal in

2001. Thus, by FY 2002, all hospitals will be paid entirely with federal rates.<sup>21</sup>

With the end of the transition for capital payments, both operating and capital prospective payments will be made using standard federal rates. The operating base rates, or standardized amounts, differ according to hospital location in large urban areas or other areas, while a single capital base rate applies to all hospitals. In FY 2002, federal prospective payment rates could be calculated by adding the current standardized amounts for operating costs and the standard federal rate for capital costs to yield a rate that would vary by hospital location, as do current standardized amounts.

Both operating and capital payments are adjusted to reflect certain attributes of hospitals and patients. However, the operating and capital adjustments differ from one another; a combined payment system would require a single set of adjustments, which the Congress would have to take legislative action to implement.

A combined payment system would also require a single update to reflect changes in prices and other factors. The general update framework MedPAC intends to use to recommend updates in the future is based on the premise that capital and operating payments will be combined (Chapter 4). Operating updates are currently set by statute, while capital updates are set at the discretion of the Secretary. The Congress will have to decide whether updates for combined rates will be set by statute or by the Secretary through the rulemaking process.

As discussed later in this chapter, the Commission is examining broad reforms to the PPS, including DRG refinement

and modification of the graduate medical education payment and the IME and DSH adjustments. The Commission believes that a combined hospital prospective payment rate should be established whether or not broader reforms are undertaken. However, if the Congress acts on any or all of the Commission's recommendations, it should consider combining operating and capital payments as part of a larger package. Creating a combined payment is a simple change with no budgetary impact but with substantial payoff in terms of the simplicity and credibility of Medicare hospital payment.

MedPAC's recommendation to combine operating and capital payments is not intended to change total payments. The Commission believes that the Congress should introduce a combined payment system with budget neutrality rules similar to those applied to other major PPS changes.

The conceptual appeal of combining rates would be irrelevant if major unforeseen and negative consequences resulted. Accordingly, the Commission analyzed the impact of a combined payment rate on hospitals. We found negligible changes in revenue across groups of hospitals and small changes for individual hospitals.

We modeled the combined rate policy by examining the distribution of payments under FY 2000 payment rules (other than those changed in the simulation).<sup>22</sup> We applied the operating DSH adjustment to total payments at hospitals qualifying for the operating adjustment in 2000. We also applied a newly estimated IME adjustment appropriate for use with combined payments.<sup>23</sup> The analysis introduces both changes in a budget neutral manner so that there is no change

in aggregate disproportionate share, indirect medical education, or total payments.

By design, combining capital and operating payments does not change total payments. Payments for major classes of hospitals change less than 0.1 percent, and in some cases as little as 0.01 percent (Table 3-6). When hospitals are grouped by number of beds, census division, DSH status, and special payment status (such as sole community, rural referral center, and high Medicare), no group has a change greater than 0.5 percent. Despite applying operating DSH rules to capital payments, only the rural DSH hospital group experiences a change exceeding 0.25 percent.

Changes are fairly uniform within each group of hospitals. We ranked major groups of hospitals by percentiles of changes in payment within each group. In all but one case, the increase or decrease for hospital groups at the 1st and 99th percentiles is less than 1 percent. That is, the 1 percent of hospitals with the greatest decline experienced less than a 1 percent drop in total payments, while the 1 percent with the greatest increase had less than a 1 percent jump.

### **Improving the patient classification system and relative weights**

Medicare uses the diagnosis related groups (DRG) patient classification system to set operating and capital payment rates for about 500 distinct types of cases that are expected to require different amounts of providers' resources. HCFA annually updates the DRG definitions to account for changes in technology and medical practice that may affect treatment costs for specific diseases

21 A small number of hospitals will continue to receive hold-harmless payments and will not be paid entirely with prospective federal rates in 2001. These hold-harmless payments will not be made in 2002 after the end of the transition.

22 Both operating and capital payment systems apply adjustments to the standard rates to reflect differences between hospitals. Although most adjustments address similar issues, they generally differ in formulas and variables. The DSH adjustment uses different formulas for operating and capital payment. Rural hospitals and urban hospitals with less than 100 beds are eligible for the operating adjustment, but not for the capital adjustment. The IME adjustment applied to operating payments adjusts for differences in the number of residents per bed, while the IME applied to capital payments adjusts for differences in the number of residents per average daily inpatient census. The Congress will have to resolve these differences to combine operating and capital payments.

23 The Commission has made recommendations for major reform of DSH payment policy and for payments for medical education (MedPAC 1999a, 1999c). It is considering proposals to develop a more refined DRG system (discussed next in this chapter). Because the work is ongoing, this analysis does not include these changes.

**TABLE  
3-6**

**Change in total payments under combined payment for hospital operating and capital costs**

Hospital group	Average percentage change	Percentiles	
		1 <sup>st</sup>	99 <sup>th</sup>
All hospitals	0.00%	-0.47%	0.66%
Rural	0.07	-0.13	0.70
Urban	-0.01	-0.63	0.61
Major teaching	0.04	-2.85	0.68
Other teaching	-0.01	-0.61	0.59
Nonteaching	-0.01	-0.24	0.67
Proprietary	0.01	-0.90	0.71
Rural government	0.10	0.00	0.68
Urban government	0.08	-0.45	0.61
Voluntary	-0.01	-0.52	0.65

Source: MedPAC analysis of Medicare Cost Report data.

and conditions. It also sets relative weights for the DRGs, which are intended to measure the relative costliness of a typical case in each category compared with the average cost for all Medicare cases. The base PPS payment rates for each case are determined by multiplying the hospital's base operating and capital payment amounts by the relative weight for the DRG to which the patient is assigned.<sup>24</sup> Hospitals also may receive extra payments for cases—called outliers—that are extraordinarily costly compared with the regular payment rates in the applicable DRG.

All else being equal, Medicare's payments would automatically reflect efficient hospitals' expected costs for the mix of cases they treat if the DRG definitions and weights were accurate. Limitations in either the classification system or the relative weights, however, may cause Medicare to pay too much for cases in some DRGs and too little for those in other categories. These potential payment

errors could lead to access or quality problems for beneficiaries or, at the very least, weaken the relationship between hospitals' levels of efficiency and their financial outcomes.

MedPAC's preliminary research suggests that refining the DRGs and relative weights would make the PPS payment rates more accurately reflect hospitals' costs of furnishing care to Medicare beneficiaries. It also indicates that these refinements would result in a substantial redistribution of payments among providers.

**Limitations in the DRG definitions and the relative weights**

The Commission's current interest in case-mix refinement originated in its August report to the Congress on payment policies for graduate medical education and teaching hospitals (MedPAC 1999a). In that report, we argued that Medicare's separate payments for hospitals' direct

costs of graduate medical education (GME) programs and its IME payments under PPS should be viewed as payments for patient care, rather than as support for residents' training. We also promised to evaluate potential policy changes that might make this concept operational, with the goal of developing specific recommendations for Medicare payment policy.

In this context, we initially viewed refining the DRG definitions and relative weights as one element of a potential strategy for improving Medicare's payment policies for teaching hospitals—those that operate approved GME programs for training physician residents. Historically, inpatient care costs for these providers have been systematically higher than those experienced by other hospitals. To the extent that teaching hospitals' higher costs reflect their tendency to treat a disproportionate share of severely ill patients, refinements in case-mix measurement might improve payment accuracy. Further, many observers anticipated that capturing severity differences more effectively through the DRG payment rates might substantially diminish the role of the IME payment adjustment and improve payment equity among hospitals.

After further consideration, however, we realized that the same refinements might address long-standing limitations in case-mix measurement, which have affected payment accuracy for cases in virtually all hospitals. Individual DRG categories often include patients with predictably different expected resource costs. Although HCFA has repeatedly improved the DRG definitions since 1984, they still fail to account fully for differences in illness severity associated with substantial disparities in providers' costs.<sup>25</sup>

24 Each hospital's base operating and capital payment amounts are determined by adjusting national average operating and capital standardized amounts per discharge to reflect the level of prices for labor, supplies, and capital assets in the provider's location. For the operating payment amount, HCFA makes these adjustments using a hospital geographic wage index and a cost of living adjustment (COLA); for the capital payment amount, HCFA uses a capital geographic adjustment index and the same COLA.

25 In 1994, HCFA considered making substantial refinements to the DRG definitions to better capture severity differences among patients (HCFA 1994). In its 1995 March report to the Congress, the Prospective Payment Assessment Commission (ProPAC 1995) recommended that the Secretary adopt the proposed refinements and also change the methods used to calculate the DRG weights. HCFA did not adopt the proposed refinements, largely on the grounds that it lacked statutory authority to make prospective adjustments to the PPS payment rates. HCFA policymakers felt that prospective adjustments would be needed to offset unwarranted spending growth that might result from changes in hospitals' case-mix reporting in response to major revisions in the DRG definitions and weights.

Limitations in the relative weights stem from their basis and method of calculation and from the statutory scheme for financing outlier payments. As presently calculated, the weights may understate the relative costliness of typical cases in some DRGs while overstating it for other DRGs. These distortions occur because the weights are based on the total billed service charges hospitals report on their claims for all cases in each DRG; therefore, the measured relative values partly reflect systematic differences among hospitals in the average mark-up of charges over costs and in the level of average costs. Also, the weights reflect total charges for all cases without accounting for differences among DRGs in the prevalence of outlier cases and related payments.

### Potential refinements

To address the limitations of the current DRGs and relative weights, MedPAC is evaluating three potential refinements in Medicare's policies and methods. One would change the DRG definitions to account more completely for severity differences among patients. The other two would alter the current methods of calculating the DRG relative weights and the policy for financing outlier payments.

**Refining the DRG definitions** To illustrate potential gains of DRG refinement, we are using the severity class definitions from the all patient refined diagnosis related groups (APR-DRG) patient classification system.<sup>26</sup> The APR-DRG definitions differ from the current DRGs primarily in how they use information about patients' secondary diagnoses reported on their hospital claims.

Current DRG definitions are based on the principal diagnosis (the condition determined to have caused the patient's admission for care), operating room procedures, age, and the presence or absence of specific secondary diagnoses

representing clinically significant comorbidities or complications (CC).<sup>27</sup> Approximately two-thirds of all DRGs comprise related pairs or triplets of categories representing adult patients with uncomplicated cases (those without a CC), adults with complications (at least one CC), or pediatric patients (under age 18) with similar conditions or surgical treatment. The remaining one-third are not distinguished by either age or the presence of secondary conditions.

The APR-DRGs aim to more accurately capture differences in patient severity of illness. Patients are initially assigned to one of 355 categories, which reflect distinct illnesses or conditions (indicated by the principal diagnosis) and the medical or surgical nature of the treatment strategy. Patients in each APR-DRG are then assigned to one of four severity classes—minor, moderate, major, and extreme—based on combinations of secondary diagnoses, age, procedures and other factors. This process yields 1,420 groups distinguished by APR-DRG and severity class, compared with about 500 current DRGs.

The principal advantage of the APR-DRG system lies in its treatment of comorbidities and complications. Instead of differentiating patient categories based on the presence or absence of a CC, the APR-DRG severity classes group patients based on the presence and the level of the CC. Moreover, the importance of a particular secondary diagnosis varies according to the nature of the patient's problems, including the principal condition, age, and the presence of certain operative procedures. Consequently, the same secondary diagnosis might result in different severity class assignments, depending on the other characteristics of the patient's condition or treatment.

If these refinements were successful, the new patient categories would discriminate more effectively among patients with

different expected costs. Other things being equal, relative weights and payment rates based on the new definitions would more accurately reflect efficient providers' costs for individual cases. Consequently, Medicare's payments would account more effectively for variations in costs among hospitals due to differences in the mix of cases they treat.

**Revising the method for calculating relative weights** The relative weights are intended to measure the relative costliness of treating a typical case in each DRG, compared with the cost of the average Medicare case. The weight for each DRG is constructed by dividing the national average standardized total charge per case for all cases in the category by the overall national average standardized charge for all cases.<sup>28</sup> Basing the weights on the average standardized charge per case in each DRG, however, makes them vulnerable to distortion from several sources.

One source of distortion is systematic differences among hospitals in the mark-up of charges over costs. Overall average cost-to-charge ratios vary among hospitals according to ownership, size, teaching and disproportionate share status, and location. In addition, the pattern of mark-ups across services varies among hospitals.

If cases in all DRGs were allocated at random among hospitals, then variations in charge mark-ups would not create any systematic distortion in the relative weights. Cases in high-weight DRGs, however, are much more likely to be treated in large urban and teaching hospitals; those in low-weight DRGs are disproportionately likely to be treated in small urban and rural hospitals. Consequently, the average mark-up implicit in the national average standardized charges varies among the DRGs. This distorts the DRG weights, making them vary more than the actual relative cost of treatment.

26 The APR-DRGs are one of several commercially available sets of refined DRG definitions (Averill et al. 1998).

27 Comorbidities and complications are defined as coexisting conditions that were present at admission and those that developed during the stay, respectively.

28 The reported total charges for each case are standardized to remove the effects of geographic differences in input prices, and of the IME and DSH adjustments.

A similar problem results from systematic differences in costs among hospitals. Standardizing the charges for each case aims to remove variation caused by geographic differences in the level of input prices and by hospital-specific differences in the extent of their teaching activity and service to the poor. However, the payment adjustments used for this purpose do not accurately represent cost differences among hospitals. Moreover, these adjustments do not account for systematic differences in costs that reflect other factors, such as variations in practice patterns or in efficiency. Because cases are not randomly distributed among hospitals, these differences also may affect the weights.

These problems could be addressed by calculating the DRG relative weights based on hospital-specific relative values. The relative weights would continue to be based on hospitals' billed charges; however, the charges for each hospital's cases would be converted to relative values.<sup>29</sup> Then, the national relative weight in each DRG would be calculated as the case-weighted average of the relative values for all cases in the category.<sup>30</sup>

This relative value method would eliminate distortions caused by systematic differences among hospitals in the level of charge mark-ups or costs.<sup>31</sup> Other things being equal, the relative weights would more accurately reflect the relative costliness of typical cases in each DRG, thus improving payment accuracy at the case level and payment equity among hospitals.

**Revising Medicare's outlier financing policy** The third potential refinement attempts to address long-standing problems associated with the method of financing outlier payments. Medicare makes extra payments for unusually costly cases, intended to limit hospitals' financial

risk from extraordinary cases and diminish any financial incentive to avoid patients with especially serious illnesses.

Under current law, outlier payments are financed by offsets applied to the operating and capital base payment amounts—in FY 2000, 5.1 percent for the operating payment amount and 6.1 percent for the capital amount. All hospitals thus pay for mandatory outlier insurance through a flat proportionate reduction in their regular payments for cases in all DRGs.

Outlier cases and payments are concentrated, however, in certain DRGs; outlier payments as a proportion of total DRG payments vary from nearly zero in many DRGs to more than 20 percent in a few categories. The mismatch between uniform financing of outlier payments and the disparities in their prevalence causes two problems. The amounts that Medicare charges for outlier insurance do not reflect hospitals' risks of encountering outlier cases. Low-risk hospitals—small urban or rural hospitals, for instance—are overcharged for outlier coverage, while high-risk providers—large urban and teaching hospitals, for example—are undercharged.

The second problem arises because the relative weight in each DRG is based on total standardized charges for all cases in the category, without accounting for differences in the expected prevalence of outlier cases and payments among categories. If outlier payments were expected to account for 20 percent of total DRG payments in a particular category, and the weighted average operating and capital offset was 5.2 percent, then the payment rates for typical cases in that DRG would be 14.8 percent too high. Similarly, the payment rates for a DRG in which outlier payments account for 0.1 percent of total DRG payments would be 5.1 percent too low.

The third potential refinement would finance expected outlier payments in each DRG through an offsetting reduction in the relative weight for the category, rather than by the current flat reduction in the base payment amounts. The relative weight for each DRG would thus approximate more accurately the relative costliness of typical (nonoutlier) cases in the category, largely eliminating this source of distortions in the payment rates among DRGs with different outlier prevalence rates.

### Overall findings from the analysis

In our analyses to date, MedPAC has focused on the effects of each potential case-mix refinement, compared with current policies, with the refinements analyzed as incremental policy combinations (Table 3-7). The first option consists of using refined DRGs—illustrated by the severity class definitions of the APR-DRGs—with relative weights based on conventional methods similar to those HCFA now uses. The second option uses refined DRGs, but replaces the conventional weights with new ones based on hospitals' relative values (relative value weights). The third option uses refined DRGs with relative value weights individually reduced to finance expected outlier payments for the cases in each refined DRG.

The Commission has developed and examined several measures to illuminate potential effects of the case-mix refinements under consideration. These include indicators of:

- the extent to which costs vary among the cases within each DRG and APR-DRG severity class,
- the dispersion of the relative weights under each refinement option,

29 Hospital-specific relative values are calculated by dividing the charges for each case by the hospital's overall average charge per case, and then multiplying by the hospital's case-mix index. The latter adjustment is necessary to scale the relative values consistently across hospitals because a hospital's overall average charge, and the level of its relative values, reflects its mix of cases.

30 The current practices of standardizing the case-level charges and excluding statistical outliers from the weight calculation also might be discontinued.

31 Some distortion in the weights may remain to the extent that patterns of charge mark-ups among services vary systematically across hospitals. These distortions would be reflected in the weights because the mix of services furnished differs across DRGs.

**TABLE 3-7**

**Current policies and incremental case-mix refinement policy options**

Policy components:	Current policies	Option 1	Option 2	Option 3
Patient classification system				
DRGs	✓			
Refined DRGs (APR-DRG/ severity classes)		✓	✓	✓
Relative weight calculation method				
Conventional method	✓	✓		
Relative value method			✓	✓
Outlier financing method				
Offsets to the base payment amounts	✓	✓	✓	
Offsets to the weights for refined DRGs				✓

Note: DRG (diagnosis related group), APR-DRG (all patient refined diagnosis related group). Conventional method: weights are based on average standardized charges in each DRG or refined DRG. Relative value method: weights are based on the average of hospitals' relative values in each refined DRG.

- changes in hospitals' case-mix indexes and PPS payments under each option, and
- changes in the volume and distribution of outlier cases and payments among hospitals under each option.

Estimates for these measures were based on Medicare hospital inpatient claims for PPS hospitals in FY 1997. The Commission employed its PPS payment model to estimate hospitals' PPS

payments under current policies and each refinement option, using operating and capital payment amounts for FY 1999, but setting most other parameters to reflect the policies in effect for FY 2000.

**Using refined DRGs: option 1** The Commission's analysis of these policy options suggests a number of preliminary findings. First, adopting severity distinctions similar to those embodied in the APR-DRGs would identify many more distinct patient categories with marked differences in expected costs. In

many instances, cases now classified in one DRG would be reassigned to the four severity classes of a single APR-DRG. In other instances, the number of groups would increase more modestly because cases from two or three DRGs would be regrouped into the severity classes of one APR-DRG. Sometimes, cases from a single DRG would be regrouped into the severity classes of two or more APR-DRGs.

The last case is illustrated by DRG 14, which includes specific cerebrovascular disorders except transient ischemic attack. Cases in DRG 14—mainly stroke patients—would be reassigned to the severity classes within four separate APR-DRGs, making a total of 16 categories (Table 3-8). Note, however, that more than 70 percent of all cases would fall into the moderate or major severity classes and relatively few would be assigned to the minor or extreme groups.

Estimated average standardized costs per case generally differ substantially among the refined DRG categories (Table 3-9). Not all cost differences are large, however. In APR-DRGs 045, 046, and 058, for example, the average cost differences between the minor and moderate classes are all less than \$700.

Several hundred of the 1,420 refined DRGs are empty or have only a few cases,<sup>32</sup> and cost differences among some of the remaining categories may be too

**TABLE 3-8**

**Cases in DRG 14, by APR-DRG and severity class, 1997**

APR-DRG	Number of cases	Percent of		Percent of APR-DRG cases by severity class			
		DRG 14	APR-DRG	Minor	Moderate	Major	Extreme
Total	352,679	100%					
044	42,600	12	100%	17%	35%	34%	14%
045	222,691	63	100	10	54	26	10
046	86,023	24	80	12	56	25	7
058	1,365	1	5	23	52	22	2

Note: DRG (diagnosis related group), APR-DRG (all patient refined diagnosis related group). Groups: 044—intracranial hemorrhage, 045—cerebrovascular accident (CVA) with infarct, 046—non-specific CVA and precerebral occlusion without infarct, and 058—other disorders of nervous system. Severity Class percents may not total 100 due to rounding.

Source: MedPAC analysis of fiscal year 1997 hospital claims data from HCFA.

32 Although 1,286 refined DRGs have at least one case in the 1997 data, 87 of these categories have fewer than 25 cases, 919 have more than 500 cases, and 383 have more than 5,000.

**TABLE  
3-9**

**Average standardized cost for cases in DRG 14, by APR-DRG and severity class, 1997**

APR-DRG	Average standardized cost				Percent increase compared with minor		
	Minor	Moderate	Major	Extreme	Moderate	Major	Extreme
044	\$3,195	\$4,214	\$5,454	\$11,255	32%	71%	252%
045	3,323	4,101	5,764	10,990	23	74	231
046	2,984	3,604	4,902	8,963	21	64	200
058	2,534	3,224	4,639	10,192	27	83	302

Note: DRG (diagnosis related group), APR-DRG (all patient refined diagnosis related group). The comparable average standardized cost in DRG 14 is \$4,969. Groups: 044—intracranial hemorrhage, 045—cerebrovascular accident (CVA) with infarct, 046—nonspecific CVA and precerebral occlusion without infarct, and 058—other disorders of nervous system.

Source: MedPAC analysis of fiscal year 1997 hospital claims data from HCFA.

small for useful severity distinctions. Consequently, making judicious severity distinctions might raise the number of distinct categories from about 500 in the current DRGs to perhaps as high as 1,000.

Adopting refined DRGs also would substantially reduce cost variation among

the cases grouped within the refined patient categories, compared with variation within the current DRGs (Table 3-10). To make these comparisons, we calculated the average absolute difference between the standardized cost of each case and the mean standardized cost of the category to which it was assigned.<sup>33</sup> The

average absolute differences are generally smaller when cases are grouped in the refined DRGs than when the same cases are grouped in DRG 14. Moreover, similar results hold among all refined DRGs and among all types of hospitals; aggregate average absolute differences in costs for the refined DRGs are 9-10 percent lower than those for the current DRGs in all hospital categories.

Other things being equal, these findings imply that the refined DRGs would capture differences in severity and expected costliness among patients more effectively than the current DRG definitions. The evidence also shows directly that relative weights based on refined DRGs and conventional calculation methods would be more diverse and sensitive than those based on the present classification system. Together, these findings strongly suggest that PPS payment rates based on the refined DRGs would reflect more accurately providers' production costs than those currently in use.

The refined DRGs' effectiveness derives from making better use of clinical information about secondary diagnoses and procedures recorded on each hospital inpatient claim. Consequently, the refined DRGs distinguish both low- and high-severity cases that are currently treated the same. Sorting out these cases would affect

**TABLE  
3-10**

**Average absolute differences in standardized cost from group means, DRG 14 and refined DRGs, 1997**

APR-DRG severity class	Cases	Average absolute cost difference		Percent change
		DRG	Refined DRG	
0441	7,210	\$2,437	\$1,635	-33%
0442	15,041	2,397	2,148	-10
0443	14,553	3,015	3,128	4
0444	5,796	7,075	6,437	-9
0451	21,937	2,163	1,362	-37
0452	119,710	2,024	1,714	-15
0453	58,084	2,564	2,684	5
0454	22,960	6,486	5,517	-15
0461	10,556	2,309	1,251	-46
0462	48,036	2,096	1,499	-28
0463	21,588	2,331	2,314	-1
0464	5,843	4,857	4,688	-3

Note: DRG (diagnosis related group), APR-DRG (all patient refined diagnosis related group). The last digit of the APR-DRG number indicates the level of the severity class: 1—minor, 2—moderate, 3—major, and 4—extreme. Groups: 044—intracranial hemorrhage, 045—cerebrovascular accident (CVA) with infarct, and 046—nonspecific CVA and precerebral occlusion without infarct. Refined DRG—severity classes of APR-DRG.

Source: MedPAC analysis of fiscal year 1997 hospital claims data from HCFA.

33 Absolute differences for cases in DRG 14 were thus calculated relative to the average standardized cost in that category (\$4,969). The overall average absolute difference for all cases in this DRG was \$2,646, but the average difference varies substantially among the subsets of cases assigned to different refined DRGs. Average absolute differences for the cases assigned to individual refined DRGs were calculated relative to the mean standardized cost per case in each refined category—the average standardized cost amounts shown in Table 3-9.

**TABLE  
3-11**

**Aggregate average percent change in payments compared with current policies for three case-mix refinement options**

Hospital group	Percent change in payments over current policies		
	Option 1	Option 2	Option 3
Urban hospitals, 100 beds or more	0.5%	0.4%	0.2%
Major teaching and DSH	1.5	1.5	0.2
Major teaching only	0.8	0.5	-0.1
Other teaching and DSH	0.2	0.1	0.2
Other teaching only	0.9	0.7	0.7
Neither teaching nor DSH	0.0	0.0	0.3
Urban hospitals, less than 100 beds	-1.6	-0.8	0.2
All rural hospitals	-2.7	-2.0	-1.5
Rural referral centers	-1.3	-1.0	-0.7
Sole community hospitals	-3.0	-2.1	-2.9
Other hospitals, less than 50 beds	-5.1	-3.9	-2.1
Other hospitals, 50 beds or more	-3.4	-2.7	-1.4

Note: DRG (diagnosis related group), DSH (disproportionate share hospital: a hospital that qualifies for additional payments because it serves a disproportionate share of low-income patients). Option 1: refined DRGs and conventional weights. Option 2: refined DRGs and relative value weights. Option 3: Option 2 plus DRG-specific outlier offsets.

Source: MedPAC analysis of fiscal year 1997 hospital claims from HCFA.

both the distribution of payments among hospitals, and providers' incentives to report accurate and complete clinical information on their claims.

In principle, reassigning cases to categories with appropriately low or high weights could balance out for most hospitals, with lower payments for some cases offset by higher payments for others. Aggregate PPS payments would remain the same because changes in the DRG definitions and weights are required by law to be budget neutral.<sup>34</sup>

In practice, however, our estimates of changes in case-mix indexes and payments for individual hospitals indicate that payments would rise or fall substantially for many providers. On average, payments to small urban and rural hospitals would decline, suggesting that these hospitals treat substantial numbers of patients with low severity of illness, which is masked in the current

DRGs (Table 3-11). Conversely, large urban and teaching hospitals would receive somewhat higher payments because, on average, they treat patients with higher illness severities and costs than shown by the DRGs.

The most striking result, however, is that estimated payments based on the refined DRGs would rise for some hospitals within these provider groups, but fall for many others compared with payments under current policies. MedPAC's estimates suggest that most hospitals in every provider group would experience some negative or positive change in PPS payments, indicating a substantial redistribution of payments among providers. The magnitude of the change is inversely associated with hospitals' Medicare case volumes (Figure 3-1). Almost all hospitals that would experience a rise or fall in payments of more than 10 percent had fewer than 30 Medicare cases in 1997.

Hospitals' estimated payments based on the refined DRGs could differ from those under the current DRGs for three reasons. First, the refined DRGs reveal that hospitals treat cases with lower or higher severity and expected costs than the current DRGs indicate, which means that many hospitals are now being either overpaid or underpaid relative to their expected costs. For some hospitals, payment reductions would take away revenues they should not be receiving, given the characteristics of their patients. Conversely, estimated increases in payments represent amounts that some hospitals should be receiving to accurately reflect their expected costs.

Second, our estimates might show reduced payments under the refined DRGs because hospitals may have failed to report complete clinical information. Providers that now report incomplete information about patients' secondary diagnoses do not lose payments under the current DRGs if the missing information would not have changed their patients' DRG assignments. If payments were based on the refined DRGs, the absence of the same information might cause patients' illness severity to be understated and the payment model simulation would show declines in payments for these hospitals. However, if refined DRGs were adopted, hospitals would provide the clinical information necessary to ensure full payment.<sup>35</sup>

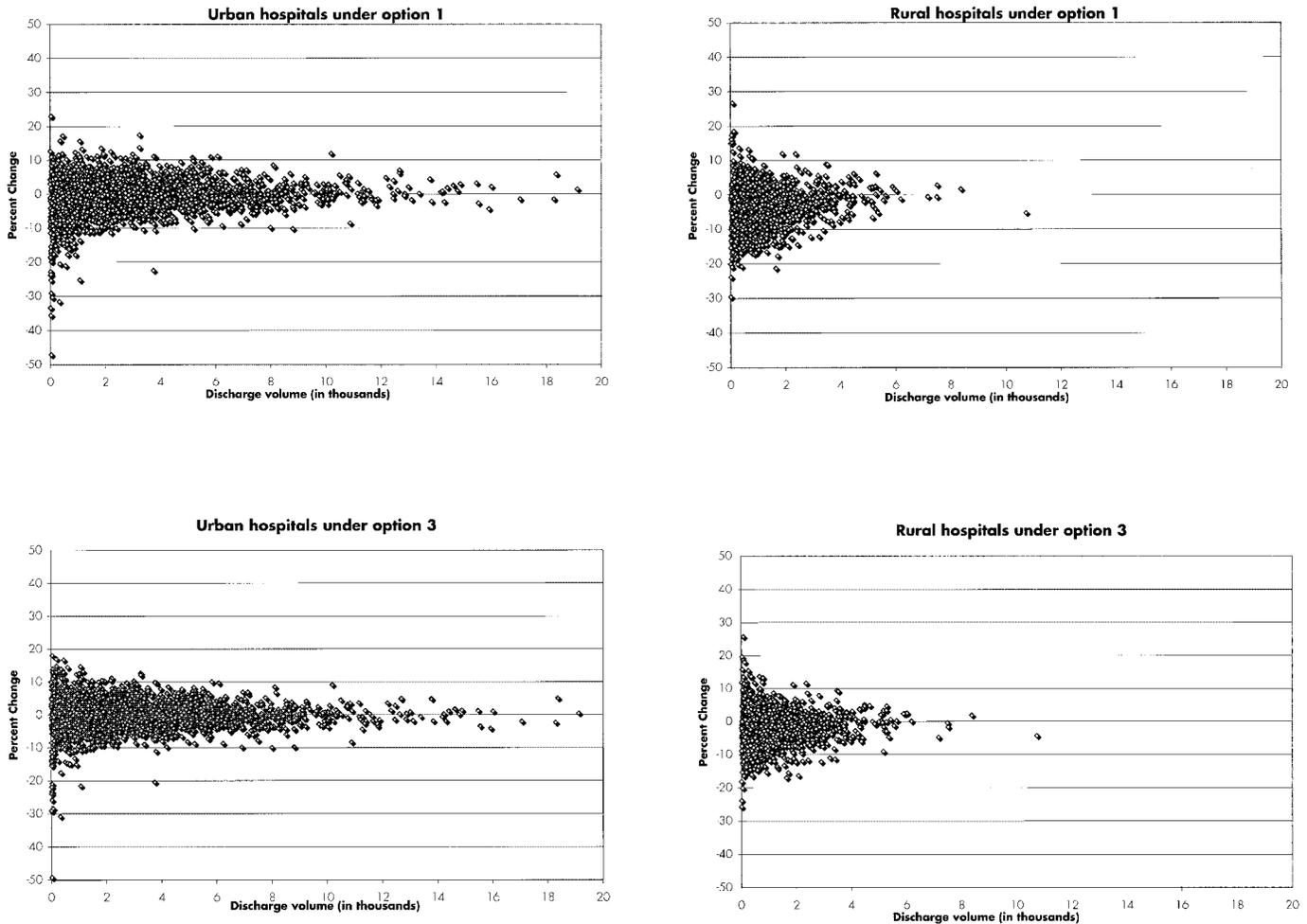
Finally, the payment changes shown in these estimates may partly reflect measurement distortion—differences among hospitals in the level of charge markups and costs and in the prevalence of outlier cases among DRGs—that exists under the current DRGs but is magnified when the refined DRGs are used. The next section discusses ways to correct these distortions, which could result in larger payment changes for individual hospitals than otherwise would occur.

34 This requirement is appropriate because these changes alter only the measurement of hospitals' case mix without changing their underlying treatment costs.

35 Although the possibility that some hospitals may overstate their patients' severity cannot be ruled out, it seems unlikely that this would be a major source of error in the payment estimates.

**FIGURE  
3-1**

**Percentage change in payments for option 1 and option 3, compared with current policies, by discharge volume, urban and rural hospitals**



Note: Option 1: refined DRGs and conventional weights. Option 3: refined DRGs and relative value weights with DRG-specific outlier offsets.

Source: MedPAC analysis of fiscal year 1997 hospital claims data from HCFA.

**Adding weights based on hospitals' relative values: option 2** Replacing the relative weights based on conventional methods with new ones based on hospitals' relative values can reduce the previously mentioned distortions. Measurement distortions are reduced in the new weights because the charges for all cases are converted to relative values at the hospital level before they are averaged together for each refined DRG. To the extent that systematic disparities in the level of charges (or costs) among hospitals affect all of their cases equally, the

conversion to relative values at the hospital level prevents those disparities from affecting the national average relative weights.

Our estimates show that relative value weights differ from the conventional weights for the same cases and tend to be higher for refined DRGs that have low conventional weights. This is because small urban and rural community hospitals—which tend to have below-average charge markups and costs—account for a disproportionate share of cases in these low-weight DRGs, pulling

the conventional weights downward. Conversely, the relative value weights are lower than the conventional ones for some refined DRGs that have high conventional weights. This is because large urban and teaching hospitals—which tend to have above-average charge markups and costs—account for most of the cases in these DRGs, thereby making the conventional weights too high.

Because the weights based on hospitals' relative values are not subject to distortions from variations in charge mark-ups and costs, they are more

accurate predictors of expected costliness among the refined DRGs than are the conventional weights. Therefore, other things being equal, the relative value weights should improve overall payment accuracy across hospitals.

Replacing conventional weights with relative value weights would tend to diminish some of the effects on hospitals' payments discussed for refined DRGs with conventional weights. The estimated average declines in payments for small urban and rural hospitals and the estimated increases for large urban and teaching hospitals would be smaller than those for refined DRGs with conventional weights (Table 3-11).

In addition, adding relative value weights would tend to narrow the distribution of changes in payments among the individual hospitals in almost all hospital groups (Table 3-12). Fewer hospitals thus would experience a large percentage change in their payments, relative to those under current policies, than would be the case with refined DRGs and conventional weights.

**Adding DRG-specific financing for outlier payments: option 3** Financing outlier payments with DRG-specific offsets to the weights would tend to diminish further many of the payment effects (relative to payments under current policies) observed when payments are based on refined DRGs with weights constructed from hospitals' relative values. Under this option, hospitals' base operating and capital payment amounts would be uniformly increased by removing the outlier offsets (5.1 percent for the operating amount and 6.1 percent for the capital amount), which are now applied to the national average payment amounts. Then, the weight for each refined DRG would be reduced to fully finance anticipated outlier payments for cases in that category.

The aggregate average percentage change in payments for the DRG-specific financing option, compared with current payments, would be closer to zero for almost all hospital groups than the changes observed for the other options (Table 3-11). The distribution of the percentage changes in payments estimated for individual hospitals also would narrow somewhat in almost all hospital groups (Figure 3-1). However, PPS payments still would change substantially for many hospitals (Table 3-12).

### Plans for further evaluation of case-mix refinement options

Although the Commission has developed and examined many of the measures needed to support potential policy recommendations on these case-mix refinement options, its evaluation effort is not yet complete. At present, a number of important questions remain unanswered:

- How would the refinement options affect payment accuracy at the case level?
- Would they alter the effectiveness of Medicare's outlier policy in limiting hospitals' financial risk from extraordinary cases, and if so, what changes in that policy might be appropriate?
- How would they affect payment equity and financial margins among hospitals?
- What administrative burdens might these refinements entail, both for Medicare and its fiscal intermediaries and for hospitals?
- What other policies might be needed if these refinements were adopted?

To answer these questions, substantial additional work will be necessary. In addition, we are interested in how the case-mix refinement options might fit together with potential changes in

Medicare's policies for making payments to teaching hospitals. We plan to continue our work on both topics over the next few months, with the goal of disseminating our findings and any related recommendations in a special report on hospital inpatient payment policies in June of this year.

### Expanding the transfer payment policy

Generally, the unit of payment under Medicare's inpatient hospital prospective payment system is the discharge. Medicare's transfer payment policy, however, is intended to recognize that when hospitals discharge patients to another provider, they may not provide the full course of care implied by a full DRG payment. Transfer cases with shorter-than-average stays, therefore, are counted as partial cases and paid a graduated per diem rather than a full DRG amount. MedPAC believes that the incentive created by the transfer policy is consistent with paying efficient providers' costs, and therefore should be maintained as part of the payment system.

Before the BBA, a case was considered a transfer only if the patient was discharged from one PPS hospital and immediately admitted to another PPS hospital.<sup>36</sup> The BBA expanded the transfer payment policy to include cases in selected DRGs discharged to PPS-exempt hospitals or units (these include rehabilitation hospitals and units, psychiatric hospitals and units, long-term care hospitals, cancer hospitals, and children's hospitals) or skilled nursing facilities.<sup>37</sup> Cases discharged from hospitals with a written plan for home health care starting within three days of discharge, related to the condition or diagnosis that accounted for the inpatient stay, are also subject to the expanded transfer policy (see text box for more details on payment methods for transfer cases). The expanded transfer policy started in FY 1999 with 10 DRGs

36 Discharges to hospitals excluded from PPS because they participated in a statewide cost control program or demonstration were also considered transfers. Recently, this policy has affected only discharges from PPS hospitals to acute care hospitals in Maryland.

37 Discharges made to hospital swing bed units, which are designated units in small rural acute care hospitals that can be used either for acute or skilled care, are currently not subject to the expanded transfer provision. HCFA considered discharges to swing beds as transfers in the proposed rule, but withdrew this provision in the final rule due to industry concerns.

**TABLE  
3-12**

**Estimated distribution of hospitals by percent change in payments compared with current policies under each policy option, for selected hospital groups**

Hospital group	Percent change in PPS payments compared with current policies						
	> -10	-5 to -10	-1 to -5	-1 to 1	1 to 5	5 to 10	> 10
Urban hospitals, 100 beds or more							
Option 1	1	9	28	21	31	10	1
Option 2	1	8	29	21	31	10	2
Option 3	*	6	28	23	33	9	1
Major teaching and DSH							
Option 1	0	5	20	16	42	13	5
Option 2	0	5	16	17	43	15	5
Option 3	0	5	26	28	26	14	1
Major teaching only							
Option 1	0	2	32	25	32	7	2
Option 2	0	2	33	28	29	6	2
Option 3	0	3	38	30	25	4	1
Other teaching and DSH							
Option 1	1	11	28	21	27	9	1
Option 2	1	9	30	20	28	10	2
Option 3	*	7	29	22	31	9	2
Other teaching only							
Option 1	1	5	25	18	36	14	1
Option 2	1	5	25	20	34	13	2
Option 3	0	6	23	21	38	12	0
Neither teaching nor DSH							
Option 1	1	9	31	21	31	6	*
Option 2	*	7	32	22	31	7	*
Option 3	*	5	27	25	35	7	*
Urban hospitals, less than 100 beds							
Option 1	12	23	29	14	14	6	2
Option 2	7	19	29	15	19	8	3
Option 3	5	13	25	21	24	10	3
All rural hospitals							
Option 1	16	30	29	12	11	3	1
Option 2	10	28	31	13	14	4	1
Option 3	6	20	34	16	18	5	1
Rural referral centers							
Option 1	3	16	39	18	20	4	0
Option 2	1	17	35	20	24	4	0
Option 3	1	9	36	25	24	4	0
Sole community hospitals							
Option 1	18	29	28	12	10	3	1
Option 2	11	27	29	13	14	5	1
Option 3	11	26	32	13	13	5	1
Other rural, less than 50 beds							
Option 1	22	35	25	8	8	2	1
Option 2	13	34	29	10	11	3	1
Option 3	5	23	33	15	18	5	1
Other rural, 50 beds or more							
Option 1	10	29	32	15	11	2	1
Option 2	7	26	34	14	16	4	1
Option 3	4	15	36	17	22	5	1

Note: PPS (prospective payment system), DSH (disproportionate share hospital: a hospital that qualifies for additional payments because it serves a disproportionate share of low-income patients). Option 1: refined DRGs and conventional weights. Option 2: refined DRGs and relative value weights. Option 3: Option 2 plus DRG-specific outlier offsets. \* Less than 0.5 percent.

Source: MedPAC analysis of fiscal year 1997 hospital claims from HCFA.

## Payment methods for transfer cases

Most transfer cases are paid a per diem payment determined by dividing the full DRG payment for a case by the geometric mean length of stay for the DRG.<sup>38</sup> Hospitals receive twice the per diem amount for the first day of care, and the per diem amount for all subsequent days of care up to the full DRG payment for the case. Very expensive cases may also qualify for outlier payments.

Under the expanded definition of transfers, the Secretary may instead provide a modified transfer payment for DRGs in which a substantial portion of the cost of care is incurred in the early days of the stay. By law, the modified payment may be no more than the average of the transfer payment and the full DRG payment. Currently, this modified transfer payment is provided in 3 of the 10 DRGs affected by the expanded transfer policy, all of which are surgical DRGs. Under the modified transfer payment that HCFA developed, hospitals receive half the full DRG payment plus a single per

diem payment for the first day of care. They then receive half a per diem payment for all subsequent days of care up to the full DRG payment for the case. HCFA decided to provide the modified payment to hospitals in selected DRGs after analysis showed that the basic transfer payment would not cover the full cost of care for these cases.

In selecting the 10 DRGs included in the expanded transfer policy, HCFA chose DRGs with a large number of discharges to post-acute care and a high rate of post-acute care use. Data from the first part of FY 1999 show that at least half the cases in these DRGs were discharged to a PPS-exempt hospital or unit, SNF, or home health care agency (Table 3-13). However, only a portion of the cases transferred to one of these settings had payments reduced, because the policy reduces payments only for short-stay cases. In most DRGs, cases that use post-acute care tend to have longer-than-average inpatient stays. ■

38 The geometric mean length of stay for a DRG is calculated by taking the product of lengths of stay for all cases in the DRG raised to 1/number of cases in the DRG. The geometric mean length of stay for a DRG is always lower than the arithmetic mean.

acute spending and use by Medicare beneficiaries (ProPAC 1997a). At the same time, hospitals' Medicare inpatient margins rose to record levels.

The conference report accompanying the BBA noted that conferees were concerned that Medicare may in some cases be overpaying hospitals for patients transferred to post-acute settings after very short hospital stays (U.S. House of Representatives 1997). Analysis by MedPAC and its predecessor Commission has shown that length-of-stay declines were greatest for DRGs in which post-acute care use was most prevalent (MedPAC 1998b). The Prospective Payment Assessment Commission (ProPAC) also found that hospitals with post-acute care units discharged their patients an average of one day sooner than did those without such units, and that their patients used post-acute care about 10 percent more frequently (ProPAC 1996).

These trends were consistent with the basic incentives of the payment system. When the hospital PPS began, the use of post-acute care providers was limited. PPS provided hospitals with a strong incentive to shorten hospital stays, and the growth in the availability and capabilities of post-acute care providers allowed hospitals to shift some of the care once provided during an acute care hospital stay to post-acute care providers.<sup>39</sup> The expanded transfer policy was intended to adjust PPS payments to reflect this shift in care for the cases where the shift was most likely to occur.

The expanded transfer policy has been a highly contentious issue within the hospital industry, which has lobbied for its repeal. The industry contends that the transfer policy "... penalizes hospitals for effective, efficient treatment and for getting post-acute patients the right care at the right time in the right setting. . . . and that it undercuts the principles and objectives of the Medicare prospective payment system, which encourage hospitals to reduce patients' length of stay" (AHA 1999).

selected by the Secretary. The Secretary is authorized (but not required) to expand the list of DRGs as of FY 2001 and has decided to delay any expansion by at least two years in conjunction with the BBRA.

### RECOMMENDATION 3K

**The Commission recommends continuing the existing policy of adjusting per case payments through an expanded transfer policy when a short length of stay results from a portion of the patient's care being provided in another setting.**

Because the expanded transfer policy was only instituted in FY 1999, limited data are available on its impact. The Commission believes the impact of the policy should be more fully understood before it is expanded to all DRGs.

A number of factors likely contributed to the Congress's decision to expand Medicare's transfer policy to include discharges to PPS-exempt hospitals and other post-acute settings. At the time the Congress was considering this policy, data showed Medicare inpatient length of stay had dropped 22 percent between 1990 and 1995 (ProPAC 1997b). This decline was accompanied by dramatic growth in post-

39 In 1988, as a result of a class action suit, HCFA clarified coverage guidelines for SNF and home health that had discouraged many beneficiaries from applying for the benefit. This change partly contributed to the growth in post-acute care use.

**TABLE  
3-13**

**Diagnosis related groups selected for expansion of transfer payment policy, 1999**

DRG	Title	Percent of all PPS cases in DRG	Percent of cases in DRG transferred to post-acute care	Percent of transferred cases with reduced payments
14	Specific cerebrovascular disorders except TIA	2.9%	51.8%	20.2%
113	Amputation for circulatory system disorders excluding upper limb and toe	0.4	69.1	47.2
209*	Major joint limb reattachment procedure of lower extremity	2.9	75.2	24.0
210*	Hip and femur procedures except major joint, age 17 or older, with CC	1.1	79.9	47.2
211*	Hip and femur procedures except major joint, age 17 or older, without CC	0.3	78.9	22.5
236	Fractures of hip and pelvis	0.3	66.6	39.0
263	Skin graft and/or debridement for skin ulcer or cellulitis with CC	0.2	61.8	44.0
264	Skin graft and/or debridement for skin ulcer or cellulitis without CC	**	51.0	37.3
429	Organic disturbances and mental retardation	0.2	56.1	43.0
483	Tracheostomy except for face, mouth, and neck diagnoses	0.4	50.3	49.7
	DRGs subject to expanded transfer policy	8.8	65.5	30.0
	All PPS cases	100.0	31.0	5.6

Note: DRG (diagnosis related group), PPS (prospective payment system), TIA (transient ischemic attack), CC (complication and/or comorbidity).  
 \* DRG with modified transfer payment. All other DRGs are paid a graduated per diem amount based on the geometric mean length of stay for the DRG.  
 \*\* Less than 0.05 percent.

Source: MedPAC analysis of partial fiscal year 1999 claims data from HCFA.

**Rationale for the expanded transfer policy**

The Commission agrees that the decision to transfer a patient to a post-acute care setting should be based on clinical rather than financial considerations and concludes that Medicare’s transfer payment policy should help lessen the influence of financial considerations on clinical decision making. Two strong conceptual rationales support the basic concept of the expanded transfer policy. The first concerns improving the financial incentives in the payment system, and the second involves enhancing the overall equity of Medicare payments for patient care.

**Financial incentives** A per case payment system provides strong financial incentives for hospitals to shorten inpatient stays, which can occur in one of three ways. First, hospitals can provide care more efficiently—for example, by adopting new technologies. Second, they can shift a portion of care to another setting. Finally, hospitals can stint on care—discharging “quicker and sicker.”

A graduated per diem payment reduces the incentive for hospitals to transfer

patients to post-acute settings by bringing payments more in line with the marginal cost of providing care. When hospitals are paid less for short stays and more for long stays, the decision to transfer will be influenced less by financial considerations; hospitals should be financially indifferent to the decision to transfer a patient to a post-acute setting if the marginal cost of care and the per diem payment amounts are close. Past research has shown that Medicare’s current transfer payment method provides a reasonable approximation of marginal cost (Carter and Rumpel 1994). HCFA’s analysis shows that its payments should, on average, more than cover the cost of care for these cases (HCFA 1998).

**Payment equity** A second major rationale for adopting the expanded transfer policy relates to improving the equity of payments across cases. The expanded transfer policy provides a more targeted approach than adjusting payment updates to account for unbundling. Both the transfer policy and the adjustment for unbundling in MedPAC’s update framework (discussed in Chapter 4) remove from PPS payments what might

be considered a double payment for care. However, the update approach removes the excess payment proportionately from all hospitals and cases, while the transfer policy reduces payments only for cases of unbundling.

The expanded transfer policy also accounts for differences across providers in the availability and use of post-acute care for short-stay cases. In general, it provides a payment reflecting the care provided during the acute inpatient stay, recognizing that use of post-acute care can begin at different points in similar patients’ care. Hospitals with post-acute care units, for example, may be able to move patients safely to a post-acute care unit earlier than would hospitals that need to transport patients for post-acute care. Similarly, hospitals that have nearby specialized post-acute facilities may be able to arrange an appropriate transfer, while other hospitals have few practical alternatives to completing the episode of care in the acute setting. The transfer policy matches payments to the local circumstances, rather than applying the same payment in widely differing circumstances.

Tracheostomy cases provide an example of the potential inequities of the payment before the expanded transfer policy. Cases in DRG 483 have a geometric mean length of stay of 33 days and receive DRG payments more than 10 times the average for all cases. However, hospitals in areas with facilities that can provide ventilator support for these patients are potentially able to transfer patients relatively early in a stay (after as few as three days) and thus receive a full DRG payment and a large per case profit. Under the expanded transfer policy, these cases now receive a much smaller payment. Even so, HCFA's analysis shows that transfer payments are still greater on average than the cost of care provided in the hospital (HCFA 1998). Because the availability of long-term care hospitals and SNFs with ventilator support capacity varies tremendously, hospitals in close proximity to such providers were greatly advantaged relative to other hospitals. The expanded transfer policy, however, will reduce payments to the transferring hospital in such situations, bringing payments more in line with the cost of providing care and removing the potential for a large per case profit realized from transferring such a patient.

### Impact of the expanded transfer policy on hospital payments

The expanded transfer policy reduced payments for only a small portion of PPS hospital discharges. The 10 DRGs subject to the policy accounted for 9 percent of PPS discharges. Almost 66 percent of these cases were discharged to a SNF, PPS-exempt hospital or unit, or home health care agency, but only 30 percent of the cases transferred to one of these settings had payments reduced (Table 3-13). Overall, the expanded transfer policy reduced payments for 1.7 percent of all PPS cases.

Based on preliminary data from FY 1999, Medicare's expanded transfer policy reduced PPS payments by approximately 0.7 percent (Table 3-14). However, the payment impacts were highly concentrated: More than half of the savings (60 percent) came from DRG 483 (tracheostomy except for head and neck diagnoses) and more than half of the cases with reduced payments were in just two DRGs, 209 (major joint and limb reattachment procedures of the lower extremity) and 210 (hip and femur procedures except major joint, age 17 or older, with complications or

comorbidities). The payment impact on hospitals was also concentrated. Half of all hospitals had payments fall by less than 0.3 percent as a result of the expanded transfer policy, but one-tenth had payments fall by 1.5 percent or more.

From 1997–1999, the DRGs subject to the expanded transfer policy had a smaller drop in inpatient length of stay (1.4 percent in aggregate) than the decline for all cases (2.7 percent). The average length of stay drop in other DRGs with a large number of cases that use post-acute care was 3.1 percent. The lack of adverse impacts, combined with strong policy rationales, led the Commission to recommend continuing the expanded transfer policy.

### Improving disproportionate share payment calculation and distribution methods

Medicare disproportionate share (DSH) payments are distributed through a hospital-specific percentage add-on applied to the basic DRG payment rates. Consequently, a hospital's DSH payments are tied to its volume and mix of PPS cases. The add-on for each case is

**TABLE 3-14**

**Impact of expanded transfer policy on Medicare prospective payment system payments, by diagnosis related group, 1999**

DRG	Title	Aggregate payment reduction for cases in DRG	Share of savings from expanded transfer policy	Share of cases with reduced payments
14	Specific cerebrovascular disorders except TIA	2.6%	8.2%	17.5%
113	Amputation for circulatory system disorders excluding upper limb and toe	9.9	10.6	7.3
209*	Major joint limb reattachment procedure of lower extremity	1.8	10.4	30.7
210*	Hip and femur procedures except major joint, age 17 or older, with CC	2.8	5.0	23.9
211*	Hip and femur procedures except major joint, age 17 or older, without CC	1.6	0.5	2.6
236	Fractures of hip and pelvis	3.1	0.7	4.9
263	Skin graft and/or debridement for skin ulcer or cellulitis with CC	8.4	3.5	3.3
264	Skin graft and/or debridement for skin ulcer or cellulitis without CC	4.8	0.2	0.3
429	Organic disturbances and mental retardation	5.5	1.1	3.4
483	Tracheostomy except for face, mouth, and neck diagnoses	7.8	59.9	6.1
	DRGs subject to expanded transfer policy	4.9	100.0	100.0
	All PPS cases	0.7	100.0	100.0

Note: DRG (diagnosis related group), TIA (transient ischemic attack), CC (complication and/or comorbidity), PPS (prospective payment system). \*DRG with modified transfer payment. All other DRGs are paid a graduated per diem amount based on the geometric mean length of stay for the DRG.

Source: MedPAC analysis of partial fiscal year 1999 claims data from HCFA.

determined by a complex formula based on the hospital's share of low-income patients, which is the sum of two ratios—Medicaid patient days as a share of total patient days, and patient days for Medicare beneficiaries who receive Supplemental Security Income (SSI) as a percentage of total Medicare patient days.

DSH payments grew rapidly between FY 1989–1997, rising from \$1.1 billion to \$4.5 billion;<sup>40</sup> 1998 payments were also \$4.5 billion. Changes instituted by the BBA had reduced DSH payments by 3 percent in 2000, 4 percent in 2001, and 5 percent in 2002.<sup>41</sup> However, the BBRA restored some of these payment cuts, holding them to 3 percent in 2000 and 2001 and 4 percent in 2002. According to Congressional Budget Office estimates, the cost of these restorations over five years is \$100 million. The BBRA also adopted a previous MedPAC recommendation that directs the Secretary to collect data on uncompensated inpatient and outpatient care—including non-Medicare bad debt and charity care, as well as Medicaid and other indigent care charges—for cost periods after October 1, 2001, as a foundation for developing a new Medicare DSH payment formula.

Several longstanding problems with the calculation of DSH payments have been recently compounded by issues arising from the legal and regulatory interpretation of DSH payment policies. Now more than ever, the Commission believes that a more equitable and much simplified alternative is needed.

### **Purpose of the disproportionate share adjustment**

The original justification for the DSH adjustment presumed that poor patients are more costly to treat; therefore, hospitals with substantial low-income patient loads must have higher costs associated with caring for Medicare patients than do similar institutions.

ProPAC, MedPAC's predecessor Commission, adopted an alternative objective statement that had evolved over time: To protect access to care for Medicare beneficiaries, additional funds should be provided to hospitals whose viability might be threatened by providing care to the poor. Although the financial pressure from treating low-income patients can include any extra costs incurred, the primary threats are underpayment or nonpayment. MedPAC data has shown that of the major payer groups, Medicaid payments, on average, are the lowest. Payments of local indigent care programs are lower than those of the major payer groups, and uninsured patients generate the least funding, even after accounting for local operating subsidies (MedPAC, 1998a).

An important corollary to the notion that the DSH adjustment should help protect access to care for Medicare beneficiaries is that the assistance should go to hospitals used by Medicare patients. This can be best accomplished by continuing to make a case-level adjustment (that is, as a percentage add-on to the base DRG payment), assuring that the amount of assistance a hospital receives is proportional to its Medicare patient load as well as its low-income patient load. Thus, a hospital serving only a few Medicare patients might receive a large add-on in percentage terms, but the total amount of assistance would still be fairly limited.

### **Problems with the current system**

The Commission believes that special policy changes are needed to ameliorate several problems inherent in the existing disproportionate share payment system. The current low-income share measure does not include care to all the poor; most notably, it omits uncompensated care. Instead, the measure relies on the share of resources devoted to treating Medicaid

recipients to represent the low-income patient load for the entire nonelderly poor population. However, states have always had different eligibility requirements for Medicaid, and changes implemented under waivers in recent years (particularly in Tennessee and Oregon) have created even more inconsistency. As a result, state Medicaid programs cover widely differing proportions of the population below the federal poverty level. Moreover, previous MedPAC analysis has established that, even within states, the hospitals with the largest uncompensated care burdens often do not have the largest Medicaid patient loads, and vice versa.

In addition, because the Medicaid and Medicare SSI ratios are simply added to form the low-income share, the current system gives more-than-proportionate weight to the amount of care provided to poor Medicare patients. Patients receiving SSI account for only about 3 percent of total patient care costs, compared with 11 percent for Medicaid, but their higher proportion of Medicare costs (about 8 percent) is currently used in calculating the low-income shares.<sup>42</sup> MedPAC's approach would treat SSI patients as other poor patients by making the low-income share equal to the sum of all low-income costs as a percent of total patient care costs.

Because of concerns about specific groups of hospitals, the Congress has legislated 10 different DSH formulas. Each includes a threshold, or minimum value, for the low-income patient share needed to qualify for a payment adjustment. This criterion limits eligibility to about 40 percent of PPS hospitals. In addition, in most cases the formula is progressive; above the threshold, the adjustment rate rises as the hospitals' low-income patient shares increase. This feature increases the DSH add-on for hospitals that devote the greatest share of their resources to treating Medicaid and SSI patients, partially offsetting the fact that these hospitals

40 This discussion is confined to the DSH adjustment made on operating payments under PPS. There is also a DSH adjustment to capital payments, based on the same underlying measure of low-income share but with a different distribution formula and a much smaller amount of money. To facilitate combining operating and capital payments, MedPAC recommends that the same formula for distributing DSH payments be used for both payment elements.

41 Medicaid payments to hospitals also include a disproportionate share component. While the BBA made cuts to funding for these payments, in 1998 the federal portion of these payments totaled more than \$9 billion.

42 These data cover the proportion of costs, although proportion of days is used in constructing low-income shares under current law.

generally have fewer Medicare cases on which to receive a DSH payment.

Using 10 different formulas to distribute payments has resulted in a highly complex program and raised questions about the equity of payments; for example, two hospitals with the same share of low-income patients can have substantially different payment adjustments. In particular, current policy favors hospitals located in urban areas; almost half of urban hospitals receive DSH payments, compared with only about one-fifth of rural facilities. Among rural facilities, the payment add-on is somewhat higher for those qualified for special Medicare payments as sole community hospitals or rural referral centers.

These underlying issues have been exacerbated by three recent problems of legal or regulatory interpretation:

- **The Pickle provision** Public hospitals that receive at least 30 percent of their net revenue from funds provided directly by state or local governments qualify for a special DSH payment rate. Known as the “Pickle provision” for the Congressman who initially proposed it, this provision is currently used to determine DSH payments for only eight hospitals. However, two recent court cases have found that HCFA’s interpretation of the law is incorrect. Rather than requiring that state and local subsidies account for 30 percent of total patient care revenue, the courts concluded that such subsidies need only make up 30 percent of patient revenue other than Medicare and Medicaid payments.

If upheld on appeal, the ruling could substantially increase the number of hospitals that qualify for DSH payment under the Pickle provision, which would shift additional funds from private to public hospitals and create even more inconsistency in the DSH payments received by hospitals treating similar shares of low-income patients.

- **State Children’s Health Insurance Programs (CHIP)** Under CHIP, states can increase health insurance coverage for low-income children up to age 19 (and in some cases their parents) by expanding Medicaid, establishing a new program separate from Medicaid, or implementing a combination of both. As of August 1, 1999, all 50 states and the District of Columbia had developed plans for children’s health insurance expansions. Eighteen states have expanded their Medicaid program, 17 states have created insurance programs separate from Medicaid, and 16 states have done some combination of both.

The fact that all states have embraced the CHIP program has raised the question: Will the covered hospital days be used in calculating a hospital’s low-income share for Medicare DSH payments? HCFA has clarified that CHIP days will count only if the state’s program is part of Medicaid. HCFA’s interpretation is consistent with the law, and it does limit the unbudgeted increase in DSH payments that will result from the states’ implementation of CHIP programs. However, the ruling will unintentionally penalize states that chose the separate program option, thus exacerbating the inequity inherent in the current distribution of DSH monies.

- **State general assistance programs** A number of states have state-only funded indigent care programs known as “general assistance” programs. In past years, Medicare’s fiscal intermediaries have counted general assistance days in calculating hospitals’ low-income shares, at least partly because they are sometimes administratively indistinguishable from true Medicaid days. Although the hospital industry believes HCFA’s policy guidance has been unclear, HCFA claims that its policy has always been clear: only patient days covered under the jointly funded (state/federal) Medicaid program can

be counted in calculating a hospital’s DSH payment. Initially HCFA planned to recoup the millions of dollars in alleged overpayments. However, in a program memorandum recently issued to intermediaries, HCFA has clarified this policy issue, but has agreed to forgo recovery from past years (HCFA 1999a).

## Reforming the DSH adjustment

The following recommendations essentially reiterate the basic reform proposal that MedPAC has recommended for the last two years (MedPAC 1998c, MedPAC 1998d, MedPAC 1999c). However, the Commission wishes to refine an aspect of the proposal that specifically addresses the level of the threshold. (For more details on its previous recommendations, see MedPAC’s 1998 and 1999 March reports to the Congress.)

### RECOMMENDATION 3L

**To address longstanding problems and current legal and regulatory developments, Congress should reform the disproportionate share adjustment to:**

- **include the costs of all poor patients in calculating low-income shares used to distribute disproportionate share payments, and**
- **use the same formula to distribute payments to all hospitals covered by prospective payment.**

The remainder of this section explains in greater detail the key components of MedPAC’s recommendation. Since discussions began several years ago regarding the misallocation of DSH payments, problems arising with the Pickle provision, CHIP, and general assistance programs have further strengthened our position that DSH payments must be reformed. MedPAC’s proposal would resolve all three of these issues, although a legislative change

would be required to repeal the 10 existing distribution formulas, including the Pickle provision.

### **Including the costs of all poor patients in calculating disproportionate share payments**

The measure of low-income patient share should include poor Medicare patients and patients covered by any indigent care program, as well as those who receive uncompensated care. Low-income Medicare patients would continue to be identified by their eligibility for SSI payments. Indigent care programs would include Medicaid and other programs sponsored by city, county, or state governments. All other low-income patients would be represented by uncompensated care (both charity care and bad debts), reflecting the unpaid bills of uninsured patients as well as deductibles and co-payments that privately insured individuals fail to pay.

Because program eligibility criteria vary among states and localities, the relative sizes of these four groups of patients—Medicare patients eligible for SSI, Medicaid patients, patients sponsored by local indigent care programs, and uncompensated care—also vary. In particular, hospitals' uncompensated care burdens tend to be greater when Medicaid eligibility and coverage are limited. Thus, the omission of uncompensated care from the current measure has kept some of the most financially stressed hospitals from receiving the most help from the DSH adjustment. Local indigent care programs provide insurance for a substantial number of poor people in some areas, but payments often cover only a fraction of the costs of care. Omitting patients covered by these programs from the low-income share measure may also shortchange some of the neediest hospitals. For these reasons, the low-income share measure needs to encompass the entire low-income patient population. If uncompensated care and local indigent care programs are accounted for directly in the measure of low-income share, our analysis suggests

that special provisions, such as a progressive payment formula that increases payments proportionally as low-income share rises, would no longer be needed.

A measure of provider costs is the best way to determine the amount of care furnished to low-income patients. The costs associated with each of the four groups representing low-income patients could simply be summed to arrive at an approximation of the total costs of treating the poor, with each group automatically weighted appropriately. Those costs as a percent of the hospital's total patient care expenses would then reflect the share of resources the hospital devotes to caring for the poor. To minimize the burden of data collection, charges can be used to represent costs for each of the four low-income patient groups and for all patients.

Adopting MedPAC's approach would also solve the problems presented by the Pickle provision, CHIPs, and general assistance programs. By pegging the DSH payment rate to the amount of subsidy revenue a hospital receives, the Pickle provision becomes a back-door method of recognizing uncompensated care (given that a hospital's operating subsidy is usually intended to cover uncompensated care costs). Because MedPAC's approach recognizes uncompensated care directly, there would be no further need for the provision and no need for HCFA to continue expensive court appeals.

Our approach would also account for CHIP patient days. Because all indigent care programs would be included, it would not matter whether the state chose the Medicaid or the separate program approach, resulting in a much more equitable allocation of payments. Additionally, our methodology would likely be implemented on a budget-neutral basis; therefore, overall DSH spending would not increase because of the implementation of CHIP programs.

Finally, MedPAC's approach would eliminate the controversy created by the states' general assistance programs—at

least for the future. Because all indigent care programs would be included, it would no longer matter whether patient days emanated from a jointly funded or a state-only program.

### **Using the same formula to distribute disproportionate share payments to all hospitals**

The Commission believes the objective of protecting Medicare patients' access to hospital services is best met by concentrating DSH payments on Medicare cases in the hospitals with the largest low-income patient shares. This can be done by establishing a minimum value, or threshold, for the low-income share that a hospital must have before payment is made. At the same time, it is best to avoid creating a payment "notch" at the threshold—as found in each formula under current policy<sup>43</sup>—by making the per case adjustment proportional to the difference between the hospital's low-income share and the threshold. In this way, a hospital just above the threshold would receive only a minimal increment above its base payment, with the percentage add-on rising in smooth progression as low-income share increases.

Applying the same formula in distributing DSH payments to all hospitals would help protect access to care for all Medicare beneficiaries, regardless of the size or location of the hospitals they use. As mentioned earlier, some of the formula differences in the current system resulted from attempts to alleviate deficiencies in the low-income share measure, which should not be necessary under MedPAC's proposal. Further, the much higher minimum thresholds that rural hospitals must meet in the current system would not be appropriate under a policy based on ensuring access to care. Access is a critically important consideration in all geographic areas, and the average cost share devoted to treating low-income patients is roughly equal in urban and rural areas.

### **Refining the distribution of payments**

MedPAC previously recommended a threshold that would allow between 50

43 As an example, an urban hospital with at least 100 beds receives a 2.5 percent add-on to its PPS payments if its low-income patient share is 1.5 percent (the threshold for that group) or more, but gets nothing if its share is 14.9 percent.

percent and 60 percent of hospitals to receive a DSH payment (MedPAC 1998c, MedPAC 1998d, MedPAC 1999c). A threshold in this range would concentrate payments among hospitals providing the greatest proportion of care to the poor, while moderating the disruption caused by a massive redistribution of payments. The broader definition of low-income patient share proposed by MedPAC shifts DSH payments to public hospitals because they tend to have the greatest uncompensated care levels. Of primary interest is protecting private hospitals with mid-level low-income shares that provide uncompensated care but receive little or no direct government funding. With the intent of reaching the optimum distribution of payments, we are revising our previous recommendation on the appropriate threshold level governing eligibility for DSH from a level that allows 50 percent to 60 percent of hospitals to receive DSH payments to a level that makes 60 percent of hospitals eligible.

### RECOMMENDATION 3M

**To provide further protection for the primarily voluntary hospitals with mid-level low-income shares, the minimum value, or threshold, for the low-income share that a hospital must have before payment is made should be set to make 60 percent of hospitals eligible to receive disproportionate share payments.**

Tables 3-15 and 3-16 compare the percentage change in total PPS payments resulting from implementing this recommendation by public-private teaching status and type of ownership. The tables contrast the 50 percent and 60 percent eligibility options. (Impacts on other hospital groups are presented in Appendix A, which includes a set of tables comparing thresholds that would allow between 50 percent and 60 percent of hospitals to receive DSH payments). One of the tables shows no overall change in the impact of PPS payments for urban and rural hospitals when the eligibility

**TABLE 3-15**

**Percentage change in total payments due to recommended disproportionate share policy changes, by threshold level and public/private teaching status**

Teaching status	Threshold making 50% eligible	Threshold making 60% eligible
Major teaching		
Public	3.3	1.2
Private	-0.4	-0.7
Other teaching		
Public	0.6	0.0
Private	-1.7	-1.5
Non teaching		
Public	4.5	4.5
Private	0.6	0.8

Note: Private hospitals include voluntary and proprietary ownership.

Source: MedPAC analysis of 1997 data from Medicare cost reports and the American Hospital Association Annual Survey of Hospitals.

**TABLE 3-16**

**Percentage change in total payments due to recommended disproportionate share policy changes, by threshold and urban/rural ownership**

Ownership type	Threshold making 50% eligible	Threshold making 60% eligible
Urban		
Voluntary	-1.1	-1.0
For-profit	-2.8	-2.9
Public	1.5	0.5
Rural		
Voluntary	5.0	5.3
For-profit	10.8	10.4
Public	8.9	8.6

Note: Private hospitals include voluntary and proprietary ownership.

Source: MedPAC analysis of 1997 data from Medicare cost reports and the American Hospital Association Annual Survey of Hospitals.

option was changed from 50 percent to 60 percent (-1.0 percent versus 6.5 percent, respectively).

In each category, increases in payments to public hospitals are larger than those to private hospitals (Table 3-15). However, when the minimum low-income share for eligibility is reduced to the level that makes 60 percent eligible, the increase in total PPS payments between major public

and other public teaching hospitals is greatly reduced, as is the payment disparity among public and private hospitals. At major public teaching hospitals, payment changes drop from a 3.3 percent increase to a 1.2 percent increase; other public teaching hospitals drop from a 0.6 percent increase to zero. At the same time, however, payment changes to major private and other private teaching hospitals experience a slight

additional decline. On the other hand, changing the threshold results in a modest increase in total PPS payments to private non-teaching hospitals and has virtually no effect on public non-teaching hospitals. This occurs because a large portion of public and private non-teaching hospitals are located in rural areas, and thus the current system greatly restricts their access to DSH funds. Appendix A (Tables A-5 and A-6) illustrates how the shift in DSH monies among this hospital group is influenced by the amount of Medicare and uncompensated care provided.

Table 3-16 highlights how the shift in total PPS payments to public hospitals located in urban areas is greatly reduced when the threshold is lowered from the 50 percent to the 60 percent eligibility level (1.5 percent increase reduced to 0.5 percent). Breaking the private hospital group into subgroups, the 60 percent option lessens the adverse impact for urban voluntary hospitals (1.1 percent reduction to 1.0 percent reduction) while slightly exacerbating the impact for for-profit facilities (from 2.8 percent reduction to 2.9 percent reduction). The pattern is similar in rural areas—voluntary hospitals are helped slightly more under the 60 percent option, while for-profit and public hospitals are helped somewhat less.

---

## **Improving payment for physicians' services and care in hospital outpatient departments**

---

Medicare's payment methods for physicians' services and hospital outpatient departments (OPDs) are in different stages of evolution. Payments to physicians are based on a fee schedule introduced in 1992. In contrast, OPDs are in transition toward a fee schedule called the OPD PPS, which HCFA is expected to implement in 2000. In both cases, Medicare aims to set fair payment rates, paying enough to ensure beneficiaries' access to needed care but not more than necessary to cover the cost of care.

The physician payment issues addressed in this chapter relate to how physicians' services are classified for payment under the physician fee schedule. The classification system is based on the HCFA Common Procedure Coding System (HCPCS). To promote accurate use of HCPCS codes when physicians bill Medicare for services, HCFA has taken two steps. First, the agency does pre- and post-payment reviews, including some forms of sampling and focused review. As part of this effort, HCFA has implemented documentation guidelines for an important group of services—evaluation and management (E&M) services. Second, HCFA requires its contractors to use computerized coding edits to look for inconsistencies in code assignments. The Commission agrees that documentation guidelines and coding edits may be appropriate, but offers recommendations on making these measures fairer and less burdensome.

Also, this chapter briefly introduces the Commission's concerns about making the OPD PPS consistent with payment systems for physician services and ambulatory care facilities. MedPAC is awaiting the final rule on the PPS from HCFA and will further address OPD issues after its publication.

### **Improving documentation guidelines for physicians' evaluation and management services**

Documentation guidelines for E&M services are intended to ensure that physicians are paid sufficiently, but not excessively, for the care they provide. The content of the guidelines has been controversial. Several issues are important, including the burden the guidelines impose and how they affect patient records. MedPAC believes that HCFA should work with the medical community in developing guidelines or alternatives to them. In addition, before carrying out changes, HCFA should pilot-test guidelines and/or alternatives to ensure that they are workable.

E&M services are provided by physicians during office visits or consultations, for the purpose of diagnosing and treating diseases and counseling patients. E&M services can consist of a medical history and physical examination, a review of records, patient and family counseling, contact with other health care professionals, charting, and scheduling. Types of E&M services include office and other outpatient visits, hospital inpatient visits, consultations, emergency department visits, and nursing facility visits.

Documentation guidelines for E&M services describe the elements necessary in the medical record to justify the level, or intensity, of service billed. HCFA's emphasis has been to ensure correct coding for accurate payments and to prevent upcoding. The guidelines are used by physicians to record E&M services billed to Medicare, by Medicare contractors to evaluate the appropriateness of submitted codes, and by the Office of the Inspector General (OIG) in its audits of Medicare expenditures.

The content of the guidelines has been controversial, however, as evidenced by frequent and proposed changes. In 1995, HCFA developed the first set of documentation guidelines for E&M services. The agency instituted revised guidelines in 1997, and proposed new guidelines again in 1998, but implementation of the latest set has been postponed several times pending further review. At present, physicians can use either the 1995 or 1997 guidelines.

To address this controversy, HCFA will need to consider:

- developing a system that ensures accurate coding;
- avoiding overly complex and burdensome requirements for physicians, such as counting formulas that assign points for each element of a physician's service to determine the level at which services can be billed;<sup>44</sup>

---

44 Concern about the regulatory burden of the Medicare program prompted the Congress to require, in the BBRA, a MedPAC study on the regulatory burdens placed on providers by the program.

---

- reducing documentation for billing purposes that distracts from the role of the medical record as a tool for communication between physicians; and
- limiting rigid criteria for payment that result in specialists providing care not typically considered medically necessary to justify higher-level codes.

In the current debate, counting requirements are particularly contentious. HCFA maintains that some amount of counting is necessary for consistent carrier payment, although the agency agrees that the 1998 proposed guidelines were unworkable and too cumbersome, even following physician training to use them (Tilghman 1998).

MedPAC believes documentation guidelines in some form are necessary and urges HCFA to work with the medical community to balance concerns about payment accuracy and the burden of guidelines on physicians.

### RECOMMENDATION 3N

**HCFA should continue to work with the medical community in developing guidelines for evaluation and management services, minimizing their complexity, and exploring alternative approaches to promote accurate coding of these services.**

HCFA has had success in working with the medical community on payment policy issues, and the Commission commends the agency for its efforts in this regard. For example, the agency seeks advice from the American Medical Association's (AMA) Relative Value Scale Update Committee (RUC) when conducting its five-year review of the accuracy of the physician fee schedule's relative value units (RVU). It also receives advice from the RUC when refining the fee schedule's practice expense RVUs. This partnership between HCFA and the medical community

permits the agency to fulfill its statutory responsibilities while taking advantage of the expertise of practicing physicians to help resolve complex payment policy issues.

In June 1999, the Current Procedural Terminology (CPT) Editorial Panel submitted to HCFA recommendations for revised E&M documentation guidelines that could be used consistently and accurately by physicians and health plan reviewers. The panel described its recommended documentation process as simpler, more patient-centered and clinically relevant, and less focused on numerical formulas, while still aimed at meeting HCFA's needs. Additionally, the panel emphasized that the primary role of the medical record is clinical communication and that the record needs to remain confidential.

HCFA has not yet announced a formal position on the panel's June 1999 recommendations.

In addition to supporting HCFA's work with the physician community to develop current documentation guidelines, the Commission also encourages the agency to work with the medical community in considering alternatives to documentation guidelines that also promote accurate coding. Options under the agency's consideration include the use of:

- encounter time as part of the documentation process,
- the complexity of the medical decisionmaking process when reviewing the "appropriate" level of code, and
- alternatives to random claims audits, including focused peer review of statistical outliers.

Whatever changes are ultimately proposed, HCFA should carefully consider their applicability in practical settings before proceeding.

### RECOMMENDATION 3O

**HCFA should pilot-test documentation guidelines for evaluation and management services before their implementation, and/or pilot test any alternative method. The agency should continue to work with the medical community in developing the pilot tests, and should ensure adequate time for physician education.**

Overly complex guidelines will not succeed and may compromise time spent with patients. Without testing, it is difficult to predict how physicians will interpret and react to the guidelines and their alternatives. Pilot testing would help reveal necessary changes before full implementation and identify strategies for physician training. Training of carrier medical review staff will also be important.

Pilot tests should obtain reliable data on the ease of using the guidelines or alternatives, the consistency in understanding among physicians and carrier review staff, and the effects on coding accuracy. Furthermore, the tests should include a representative sampling of physician practices in different specialties, geographic locations, and types of practice, such as solo practices and small- and large- group practices.

#### Changes in coding patterns

To receive payment for providing E&M services to Medicare beneficiaries, physicians must submit a claim, or bill, that identifies the specific services provided. HCFA has established a service coding scheme for this purpose, known as the HCFA Common Procedure Coding System (HCPCS).<sup>45</sup>

The HCPCS codes for E&M services permit billing for multiple levels of services, depending on the intensity of the service provided (Table 3-17). For example, an office visit provided to a new patient can be at one of five different levels; the level of the service is determined by the nature of

45 HCPCS codes include Physicians' Current Procedural Terminology codes, developed by the American Medical Association, and other codes developed by HCFA.

**TABLE  
3-17****Average allowed charges for high-volume evaluation and management services, by level of visit, 1998**

Type of service	Level	HCPCS code	Average allowed charge, 1998	
Office and other outpatient New patient	1	99201	\$ 30.20	
	2	99202	48.17	
	3	99203	66.82	
	4	99204	99.52	
	5	99205	125.98	
Established patient	1	99211	13.67	
	2	99212	26.46	
	3	99213	38.42	
	4	99214	58.82	
	5	99215	91.99	
Hospital inpatient	Initial care	1	99221	67.57
		2	99222	109.86
		3	99223	141.93
	Subsequent care	1	99231	35.81
		2	99232	53.34
		3	99233	74.82
Consultation Office	1	99241	44.89	
	2	99242	71.80	
	3	99243	94.65	
	4	99244	133.65	
	5	99245	181.93	
Initial inpatient	1	99251	48.61	
	2	99252	74.21	
	3	99253	98.93	
	4	99254	137.36	
	5	99255	187.07	
Follow-up inpatient	1	99261	27.15	
	2	99262	47.66	
	3	99263	70.48	
Emergency department	1	99281	20.91	
	2	99282	32.43	
	3	99283	59.74	
	4	99284	91.88	
	5	99285	145.61	
Nursing facility	Initial assessment	1	99301	56.27
		2	99302	72.97
		3	99303	104.41
	Subsequent care	1	99311	32.99
		2	99312	49.19
		3	99313	65.68

Note: HCPCS (HCFA Common Procedure Coding System). These HCPCS codes are on an ascending scale that measures the provider's complexity of decisionmaking and the comprehensiveness of the history and examination.

Source: MedPAC analysis of 1998 Medicare claims, 5 percent sample of beneficiaries.

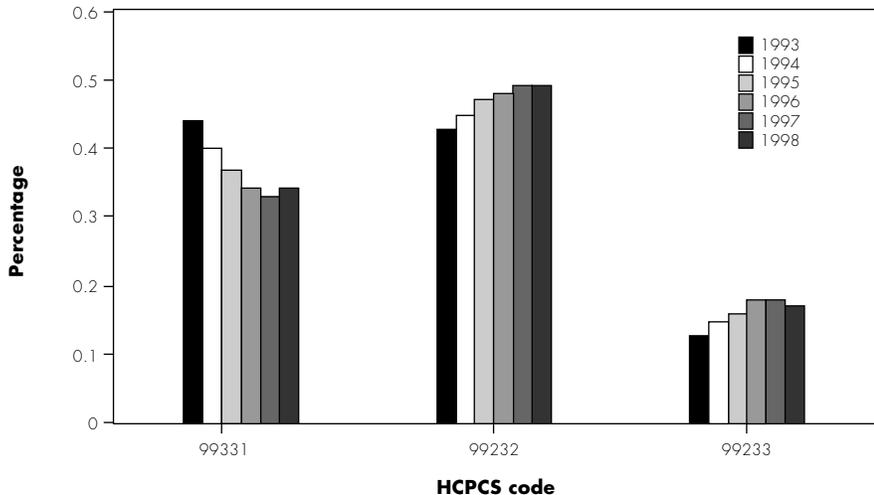
the history and examination (problem-focused, detailed, or comprehensive) and by the complexity of the medical decisionmaking. E&M services typically have three to five levels. Important patient characteristics—including age, type and severity of health problem, and presence of chronic conditions—also contribute to the level of E&M service provided.

Because E&M services have accounted for approximately 40 percent of Medicare payments to physicians, changes in coding have the potential to significantly affect payments. Codes submitted by physicians must accurately reflect the care patients receive.

Various factors could affect changes in coding patterns over time. Payment rates are one such factor. As shown in Table 3-17, payment rates vary among the different levels of each type of E&M service; the payment rate for one level of a service is approximately 50 percent higher than is the payment rate for the next lowest level. Given such differences, any ambiguity about proper coding creates an incentive to assign higher-level codes.

Other factors that could affect coding patterns include changes in the population and the care they receive, as well as changes in coding rules. Population changes may reflect aging beneficiaries. They also may reflect changes in the proportion of beneficiaries in Medicare's fee-for-service and Medicare+Choice programs, to the extent that beneficiaries in the two programs have different health profiles. With respect to the care beneficiaries receive, advances in medical capabilities may affect coding patterns to the extent that these advances increase or decrease the complexity of medical decisionmaking. In addition, shifts of care out of hospitals may have led to increased coding intensity for services provided in ambulatory care settings.

Actual experience with coding of E&M services shows shifts toward higher-level codes from 1993–1997. Coding patterns for a common type of service—hospital inpatient E&M services for subsequent care (HCPCS codes 99231-99233)—illustrate this point (Figure 3-2).

**FIGURE 3-2****Distribution of hospital inpatient evaluation and management services for subsequent care, by HCFA Common Procedure Coding System code, 1993–1998**

Note: Data are for the first six months of each year. HCPCS (HCFA Common Procedure Coding System).

Source: MedPAC analysis of Medicare claims, 5 percent sample of beneficiaries.

From 1993–1997, coding of the lowest level of this service (HCPCS code 99231) decreased from 44 percent to 33 percent of all claims paid.<sup>46</sup> During the same period, coding of the next-highest level of this service (HCPCS code 99232) increased from 43 percent to 49 percent of all claims, and coding of the highest level of this service (HCPCS code 99233) increased from 13 percent to 18 percent.

This trend appears to characterize not just the hospital inpatient E&M services discussed above, but nearly all other types of E&M services (Table 3-18). If coding intensity is measured as constant average allowed charges (using 1998 charges), coding intensity increased from 1993–1997 for all E&M services frequently provided to Medicare

beneficiaries. For the E&M services most frequently provided—office visits provided to established patients and hospital inpatient visits for subsequent care—the average annual increases were 1.0 percent and 1.5 percent, respectively.

This trend of increasing coding intensity ceased in 1998, when decreases began to occur for almost all types of E&M services (Table 3-18).<sup>47</sup> This change occurred simultaneously with several factors, including heightened attention to fraud and abuse issues in the Medicare program and random audits investigating documentation in E&M claims.<sup>48</sup>

It is unclear why the change in 1998 occurred. It may reflect a return to a more appropriate level of coding. Alternatively,

the change may indicate the beginning of downcoding; that is, physicians erring on the side of being overly cautious. This downcoding may be inappropriate, given that the beneficiary population is older and in poorer health (MedPAC 1999c) and that Medicare+Choice programs generally draw low-risk individuals from the traditional program. These dynamics would predict a trend toward higher-level E&M codes. Indeed, a recent study reports an increase in the scope of care provided by primary care physicians. The scope of care refers to the complexity and severity of medical conditions treated by physicians (St. Peter 1999). Finally, the change in coding trend could represent just a one-year aberration.

Whatever its source, the importance of changes in coding intensity for Medicare spending is clear. The average decrease in coding intensity among all E&M services, from 1997–1998, was 1.7 percent. With E&M services responsible for about 43 percent of Medicare expenditures for physicians' services in 1997, this decrease equates to a substantial 0.7 percent decrease in spending for physicians' services. Therefore, continuing attention to these trends is important.

### Disclosing coding edits

Like documentation guidelines, coding edits help to ensure that Medicare pays fairly for physicians' services. Coding edits are rules used by Medicare carriers and private insurers during claims review to detect improperly coded claims.

Examples of improperly coded claims include claims with two or more codes for services that should be billed under a single, bundled code, and claims with codes for two or more procedures that are not typically performed on the same patient and on the same day.

46 The year 1993 was judged to be a better baseline for this analysis than 1992, when major changes in E&M coding were introduced and physicians were becoming familiar with them.

47 The rate of growth for the case-mix index (CMI) in hospitals has also slowed over the past few years, and preliminary data indicate that it did not increase and may have decreased in 1998. This change is difficult to interpret, however, as attempts to recover overpayments for FY 1996 and 1997 may have contributed to the change in CMI (MedPAC 1999).

48 Results from the Chief Financial Officer's (CFO) audit of FY 1996 Medicare spending prompted HCFA to address concerns about the adequacy of documentation for services billed (Tilghman 1998). Random audits grew from this impetus and results from this and the subsequent two CFO audits further focused attention on fraud and abuse issues.

**TABLE  
3-18**

**Change in evaluation and management service coding, by type of service, 1993–1998**

Type of service	Levels	Average coding intensity						Annual change in coding intensity		Percentage of total allowed charges, 1998
		1993	1994	1995	1996	1997	1998	1993-1997	1997-1998	
Office, new patient	5	\$ 73.34	\$ 73.76	\$ 73.99	\$ 74.46	\$ 74.58	\$ 73.26	0.4%	-1.8%	4.8%
Office, established patient	5	40.23	40.69	41.01	41.50	41.82	41.16	1.0	-1.6	40.6
Hospital inpatient, initial care	3	122.28	123.51	124.49	125.26	125.33	124.60	0.6	-0.6	6.2
Hospital inpatient subsequent care	3	48.49	49.54	50.33	51.09	51.50	51.14	1.5	-0.7	21.9
Consultation, office	5	111.73	112.87	113.90	115.21	115.52	114.20	0.8	-1.1	6.3
Consultation initial inpatient	5	124.59	126.35	127.96	129.16	129.86	127.47	1.0	-1.8	7.4
Consultation, follow-up inpatient	3	44.53	45.92	46.56	47.30	48.31	47.52	2.1	-1.6	1.0
Emergency department	5	80.58	82.28	84.71	85.14	85.79	83.42	1.6	-2.8	6.6
Nursing facility, initial assessment	3	77.29	78.57	79.91	82.07	82.87	83.55	1.8	0.8	0.9
Nursing facility, subsequent care	3	42.01	42.59	43.11	43.79	44.31	43.83	1.3	-1.1	4.3

Note: Average visit intensity is the average charge for each type of visit, weighted by the number of visits at each level. Charges are constant, 1998 average allowed charges. Data are from the first six months of each year.

Source: MedPAC analysis of 1993–1998 Medicare claims, 5 percent sample of beneficiaries.

Using coding edits to enforce Medicare payment policies is generally accepted, but disagreement exists about whether the edits should be disclosed. MedPAC believes that the advantages of disclosing coding edits outweigh the disadvantages.

**RECOMMENDATION 3P**

**HCFA should disclose coding edits to physicians and should seek review of the appropriateness of those edits by the medical community.**

The Commission supports disclosing coding edits because it is important for physicians to know the criteria for claims

payment. Coding edits should enforce Medicare coverage policy, as defined by Medicare law, regulations, and instructions to carriers for claims payment. If coding edits are not known, physicians cannot know whether their claims are being paid in accordance with Medicare policies. Coding edits are effectively coverage policies. Other Medicare coverage policies are not secret; therefore, coding edits should not be secret either.

However, the Commission recognizes that disclosing coding edits has some disadvantages. If physicians know the rules, they may manipulate their billing

practices to maximize reimbursement. In addition, some may argue that businesses may be reluctant to produce edits if they must disclose them, because disclosure may limit their ability to make a profit on their product.

Currently, HCFA uses coding edits from two sources: AdminiStar and McKessonHBOC. The Medicare program initiated its Correct Coding Initiative in 1996 to address improperly coded claims; AdminiStar is a Medicare carrier responsible for creating the Correct Coding Initiative (CCI) edits. The CCI edits incorporate a standard set of edits used by Medicare carriers. These edits are

made public and shared with the medical community and the American Medical Association's (AMA) Correct Coding Policy Committee (CCPC) for review and comment before their implementation. Not all of the CCI edits are ultimately accepted. When a specialty society disagrees with an edit, its concerns are reviewed by the CCPC, HCFA and AdminiStar to ensure that the edit is consistent with CPT (Current Procedural Terminology) coding guidelines. Of the 120,000 CCI edits currently in use, only 1-2 percent were considered inappropriate by those involved in their review.

McKessonHBOC is a private vendor supplying commercial-off-the-shelf (COTS) edits, so-called "black box" edits that are proprietary and generally not disclosed to the medical community before they are carried out (Board of Trustees 1998). Claims are denied without explanation, often triggering costly and time-consuming appeals.

HCFA's contracts with both AdminiStar and McKessonHBOC expire in October 2000. The agency has promised that future contracts for coding edits will not include non-disclosure provisions, and the Commission agrees with HCFA's position.

A second important issue that HCFA should consider in future contracts is the cost of the coding edits and the savings they produce. Over approximately three years, HCFA has paid about \$700,000 for 120,000 CCI edits, producing average annual savings of \$236 million. In contrast, HCFA's two-year contract for the use of COTS edits cost \$20 million, producing projected savings of only about \$8 million in 1998 (American Medical

Association 1999), based on the use of 156 edits.

Before implementing COTS edits, the Congress and the General Accounting Office advocated that HCFA employ them. This recommendation and the actual adoption of the edits was based on a 1996 Iowa demonstration claiming potential savings of up to \$465 million from the use of the edits.<sup>49</sup> However, the purported savings were based on an assumption that all 500 edits initially selected would be used. Following internal review, HCFA eliminated edits found to contradict established Medicare policy. In addition, HCFA eliminated more edits after negotiating a confidential review of the remaining edits by the CCPC. Ultimately, the agency used only 156 of the original 500 edits. Recently, more edits have been added and reviewed by HCFA and the CCPC, and still more may be added during the final six months of the contract. The Commission urges HCFA to continue involving the CCPC in evaluating coding edits.

### **Developing a prospective payment system for care in hospital outpatient departments**

Like some of the post-acute care payment systems discussed earlier in this chapter, the payment system for hospital outpatient departments is in transition. To control spending growth, payments to OPDs are changing from a system based partly on cost to a fully prospective payment system. The BBA required implementation of this new payment system on January 1, 1999, but HCFA delayed the process, citing year 2000 computer system concerns. The agency now plans to implement the PPS in 2000.

The PPS will be much like the physician fee schedule, in which payments are determined by multiplying a fixed dollar amount (the conversion factor) by a relative weight indicating the expected relative costliness of a given service. Although payments will be based on individual services, relative weights will not be determined by service as they are for physicians' services. Instead, weights will be determined based on Ambulatory Payment Classifications (APCs), which consist of groups of services.

MedPAC has been concerned about the consistency of payments across ambulatory care settings, including OPDs, physicians' offices, and ambulatory surgical centers (ASCs). Accordingly, in comments on a proposed rule from HCFA on the OPD PPS, the Commission expressed concerns about HCFA's proposal to calculate relative weights for APCs and not individually coded services. The Commission believes that assigning uniform relative weights for all services in an APC group will not promote consistency of payment across settings. While HCFA also has proposed payments for ASCs based on APCs, payments for physicians' services are calculated based on relative weights for individually coded services.

HCFA will publish another rule on the OPD PPS at least 90 days before implementing the system. Awaiting publication of this rule, MedPAC has decided to limit its discussion of the OPD PPS, although the Commission does consider the topic in its discussion of updating payments for ambulatory care in Chapter 4 of this report. MedPAC will comment on the PPS rule when it is published. ■

<sup>49</sup> Congress recently reaffirmed their interest in COTS edits in their report accompanying the Senate Appropriations bill for the Department of Health and Human Services for FY 2000. The Senate Appropriations Committee reasserts that these edits will result in savings and urges HCFA to adopt them.

## References

---

Abt Associates. Case-mix adjustment for a national home health prospective payment system: Second interim report. September 1999a.

Abt Associates. Variation in prescribed medication costs, method of collection and impact on skilled nursing facility case mix. Contract No. 500-96-0003/TO#7. Cambridge (MA), Abt Associates. March 1999b.

American Hospital Association. H.R. 405 Medicare common sense cosponsor letter. October 20, 1999. Available at:  
<http://www.aha.org/grassroots/h405commonsenseletter.html>.

American Medical Association. An Update on Medicare's Correct Coding Initiative, CPT Assist. April 1999, Vol. 9, No. 4, p. 7 9.

Averill RF, Goldfield N, Steinbeck, BA, Grant, T, Muldoon, J, Brough, AJ, Gay J. All patient refined diagnosis related groups (APR-DRGs) definitions manual. 3M Health Information Systems, 1998.

Board of Trustees, American Medical Association. Report of the Board of Trustees, No. 35-1-98. 1998.

Carter G, Rumpel D. An evaluation of Medicare payment for transfer cases. Santa Monica (CA), RAND. Report to the Health Care Financing Administration under contract No. 500-92-0023, 1993.

Chassin MR, Galvin RW, The National Roundtable on Health Care Quality. The urgent need to improve health care quality. *Journal of the American Medical Association*. September 16, 1998, Vol. 280, No. 11, p. 1000–1005.

General Accounting Office. Skilled nursing facilities: Medicare payment changes require provider adjustments but maintain access. No. HEHS-00-23. Washington (DC), GAO. December 1999.

Hamilton BB, JA Laughlin, RC Fielder, and CV Granger. Interrater reliability of the 7-level Functional Independence Measure (FIM). *Scandinavian Journal of Rehabilitation Medicine*. September 1994, Vol. 26, No. 3, p. 115–199.

Health Care Financing Administration, Department of Health and Human Services. Program memorandum intermediaries, Transmittal No. A-99-62. Baltimore (MD), HCFA. December 1999a.

Health Care Financing Administration, Department of Health and Human Services. Medicare program: prospective payment system for home health agencies, Federal Register. October 28, 1999b, Vol. 64, No. 208, p. 58134– 58209.

Health Care Financing Administration, Department of Health and Human Services. Medicare program; changes to the hospital inpatient prospective payment system for fiscal year 1999 rates, Federal Register. July 31, 1998, Vol. 63, No. 147, p. 40954–41131.

Health Care Financing Administration, Department of Health and Human Services. Medicare program: changes to the hospital inpatient prospective payment system and fiscal year 1995 rates, proposed rule, Federal Register, May 27, 1994, Vol. 59, No. 102, p. 27715–27717.

Kramer A, Eilertsen T, Ecord M, et al., Morrison Informatics, Inc. and University of Colorado Health Sciences Center. A prospective study of new case-mix indices for subacute care. Report to the National Subacute Care Association and the American Health Care Association. June 1999.

Medicare Payment Advisory Commission. Report to the Congress: rethinking Medicare's payment policies for graduate medical education and teaching hospitals. Washington (DC), MedPAC. August 1999a.

Medicare Payment Advisory Commission. Report to the Congress: selected Medicare issues. Washington (DC), MedPAC. June 1999b.

Medicare Payment Advisory Commission. Report to the Congress: Medicare payment policy. Washington (DC), MedPAC. March 1999c.

Medicare Payment Advisory Commission. Health care spending and the Medicare program: a data book. Washington (DC), MedPAC. July 1998a.

Medicare Payment Advisory Commission. Report to the Congress: context for a changing Medicare program. Washington (DC), MedPAC. June 1998b.

Medicare Payment Advisory Commission. Report to the Congress: Medicare payment policy, volume I: recommendations. Washington (DC), MedPAC. March 1998c.

Medicare Payment Advisory Commission. Report to the Congress: Medicare payment policy, volume II: analytical papers. Washington (DC), MedPAC. March 1998d.

Medicare Payment Advisory Commission. Urban critical access hospitals: Congressional report. Washington (DC), MedPAC. December 1997.

Office of the Inspector General. Early effects of the prospective payment system on access to skilled nursing facilities: nursing home administrators' perspective, No. OEI-02-99-04400. Washington (DC), OIG. October 1999a.

Office of the Inspector General. Early effects of the prospective payment system on access to skilled nursing facilities, No. OEI-02-99-04401. Washington (DC), OIG. August 1999b.

The President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry. Final report to the President of the United States. Quality first: better health care for all Americans. Washington (DC), Quality Commission. March 1998.

Prospective Payment Assessment Commission. Report to the Congress: Medicare and the American health care system. Washington (DC), ProPAC. June 1997a.

Prospective Payment Assessment Commission. Report and recommendations to the Congress. Washington (DC), ProPAC. March 1, 1997b.

Prospective Payment Assessment Commission. Report to the Congress: Medicare and the American health care system. Washington (DC), ProPAC. June 1996.

Prospective Payment Assessment Commission. Report and recommendations to the Congress. Washington (DC), ProPAC. March 1995.

St. Peter RF, Reed MC, Kemper P, Blumenthal D. Changes in the scope of care provided by primary care physicians, New England Journal of Medicine. December 1999, Vol. 341, No. 26, p. 1980-1985.

Tilghman JL. Medicare billing code complexity. Testimony before the Subcommittee on Human Resources, House Committee on Government Reform and Oversight. April 9, 1998.

Turon G. Inclusion of payment add-ons for both rehabilitation and non-rehabilitation RUG groups in order to target medically complex patients needing IV therapy. Report to the American Society of Consultant Pharmacists. Fall 1999.

U.S. House of Representatives. Balanced budget act of 1997, Conference report to accompany H.R.2015, House report No. 105-217. Washington (DC), U.S. House of Representatives. July 30, 1997.

White A, Pizer S, White C, et al., Abt Associates. Development and refinement of the RUG-III resident classification system: preliminary findings. TEP briefing manual, Contract No. 500-96-0003/TO#5. Cambridge (MA), Abt Associates. October 1999.

Won A, Morris JM, Nonemaker S, Lipsitz LA. A foundation for excellence in long-term care: the minimum data set, *Annals of Long-Term Care*. March 1999, Vol. 7, No. 3, p.92–97.

C H A P T E R

# 4

---

## **Updating payment rates in traditional Medicare**

---

## R E C O M M E N D A T I O N

**4A** The Congress should not establish a single overall expenditure target that determines payment updates for physicians' services and ambulatory care facilities. Within existing statutory authority, the Secretary should not establish setting-specific expenditure targets.

## Updating payment rates in traditional Medicare

**M**edPAC addresses fee-for-service payment issues in two categories: those that involve the distribution of payments (covered in Chapter 3) and those that deal with the level of payments. When a prospective payment system is developed, policymakers must establish a base rate designed to pay providers fairly and to ensure access to care. They also must update payments each year to account for changes in factors determining providers' costs; the update mechanism also can be used to control overall spending growth. This chapter discusses MedPAC's general approach, with appropriate customizing, to updating the prospective payment systems that have been or soon will be implemented. Ambulatory care presents unique challenges because the Congress has already established an "expenditure target" approach for updating payments to physicians. Although a consistent updating approach across all ambulatory care providers is desirable, the Commission believes that the complexity of the issues and competing policy objectives argue for caution in considering this approach.

### In this chapter

---

- MedPAC's general framework for updating payments
  - Applying the general framework to updating skilled nursing facility payments
  - Updating payments to physicians and ambulatory care facilities
-

When developing a method for updating payments, policymakers must decide on policy objectives. The objective of maintaining consistency with efficient providers' costs is common to all update methods, but policymakers also may want to control total program spending.

Historically, differences in objectives have led policymakers to determine fee-for-service updates using two approaches. One builds the percentage update by examining historic trends and future projections for factors expected to affect providers' costs in the coming year. MedPAC and HCFA have used this approach to develop update recommendations for inpatient hospital services. The second approach takes into account some of the same factors but primarily considers whether cumulative changes in program spending are sustainable in light of projected changes in overall economic conditions. Some version of this "expenditure target" approach has been used since 1989 to set updates for the conversion factor in the physician fee schedule.

As Medicare implements more prospective payment systems (PPSs)—including those for skilled nursing facilities (SNFs), hospital outpatient departments, home health agencies, and rehabilitation hospitals—MedPAC expects to make several update recommendations each year. Where an expenditure target is not in place, the Commission has developed a general framework that accounts for the likely impact of a specific set of factors on patient care costs. Not all factors will be applicable or have significant effects in every setting, but the framework provides a starting point for developing an appropriate update for all prospectively determined payment rates and payment limits.

The first section of this chapter reviews this general update framework, and the second discusses its application to SNFs. Because the SNF PPS is new, the

Commission must decide how to construct a SNF update recommendation, including the analyses needed to support that effort. We do not anticipate recommending an update for SNFs until at least next year. However, MedPAC plans to recommend two payment updates—for inpatient hospital services in PPS and PPS-exempt facilities—in a June report on hospital payments.

The final section of the chapter addresses special issues involved in updating payments for ambulatory care provided by physicians, hospital outpatient departments, and ambulatory surgical centers. The Commission has considered the importance of achieving consistency in the updates for these three ambulatory care settings and addresses ways to achieve that consistency.

---

## MedPAC'S general framework for updating payments

---

The framework presented in this section for updating fee-for-service payments is based on a model developed by one of our predecessor commissions, the Prospective Payment Assessment Commission (ProPAC). Beginning in 1984, ProPAC's model was used to recommend annual updates for hospitals covered by the then-new PPS, as well as for inpatient facilities exempt from prospective payment.<sup>1</sup> In the more generic form presented here, the model can be adapted for application to any PPS where an expenditure target is not in place. As discussed later in the chapter, this may include hospital outpatient and ambulatory surgery center services if the Congress ultimately decides against using an expenditure target for care provided in those settings.

MedPAC's update framework is intended to provide a basis for measuring change in the efficient cost of delivering patient care. It takes into account seven cost-influencing factors, grouped into three

broad categories: changes in input prices, changes in inputs and product, and changes in case mix (Table 4-1). To estimate how much payments per unit (episode, discharge, day, or visit) should rise or fall in the coming year, we estimate the percent changes (expressed as point estimates or ranges) attributable to each cost-influencing factor and sum them.

The remainder of this section provides further detail on each of the three broad categories and seven specific components of the Commission's general update framework.

### Changes in input prices

The first two components of the framework account for increases in the prices of inputs—staff, medical supplies, insurance, and so on—that providers use in delivering patient care. A two-step process is involved: forecasting the increase in input prices for the policy year and then adjusting for past forecast errors.

### Forecast of price inflation

Inflation in input prices is measured using an index developed by HCFA that comprises a fixed set, or market basket, of cost elements, each with a weight and a price proxy that HCFA forecasts two years into the future. HCFA's forecast of the market basket indicates how much costs would be expected to rise if there were no changes in the inputs that providers used to furnish care or in the types of patients they treated.

HCFA has developed several service-specific market baskets, including those for PPS inpatient, PPS-exempt inpatient, home health, and SNF care. HCFA has not designated a market basket for dialysis services because payments for dialysis have not been updated in many years. In this case, MedPAC developed its own market basket on which to base update recommendations. These issues are discussed further in Chapter 6.

In past years, HCFA and ProPAC have disagreed on two issues in the

---

<sup>1</sup> PPS-exempt facilities include rehabilitation and psychiatric hospitals and units, as well as long-term, children's, and cancer hospitals. Under the terms of the Tax Equity and Fiscal Responsibility Act of 1983, these facilities are paid their average costs per case, subject to a facility-specific limit and a national 75<sup>th</sup> percentile cap. The annual update is applied to these limits and to the cap, rather than to payment rates as in the hospital inpatient PPS.

**TABLE  
4-1**

**Components of  
MedPAC's general  
framework for  
updating payments**

**Changes in input prices:**

- Forecast of price inflation
- Correction for previous forecast error

**Changes in inputs and product:**

- Scientific and technological advances net of productivity growth
- Unbundling of payment unit (as applicable)
- One-time factors (as applicable)

**Changes in case mix:**

- Coding changes across service categories
- Complexity changes within service categories

construction of the hospital market basket, which led ProPAC to use an alternative market basket in developing its update recommendation. The issues involved the price proxy used for forecasting increases in employee compensation rates and the method for measuring capital prices. As discussed in the following paragraphs, MedPAC plans to change its approach in these areas to allow its update framework to be applied consistently across health care sectors.

The Commission's alternative market basket equally weights expected growth in employee compensation in hospitals and in the general economy, while HCFA gives less weight to the hospital projections. During the 1980s and early 1990s, HCFA's approach produced lower market basket increases because hospital wage growth exceeded that of the general economy. ProPAC believed that the larger wage growth was due at least partly to shortages of some types of specialized hospital personnel, and that this factor should be reflected in its update

recommendations. In today's era of low price inflation, the difference between the two treatments of employee compensation in the market basket is slight. Consequently, we have decided to use HCFA's hospital market basket, and we will do the same for other health care settings.

Because hospital operating and capital payments have historically been updated separately, HCFA has maintained separate market baskets for operating and capital costs. After a 10-year transition to fully prospective payment for capital is completed in 2001, MedPAC believes that capital and operating payments should be combined.<sup>2</sup> If this is done, the Congress may elect to legislate a combined update.<sup>3</sup> HCFA will then need to develop a single hospital market basket encompassing operating and capital inputs, as it has done for its home health agency and SNF market baskets. Until then, MedPAC will weight HCFA's separate forecasts of operating and capital input prices according to the proportions of national operating and capital costs (roughly 92 percent and 8 percent).

MedPAC has also used an alternative to HCFA's market basket for capital inputs, however. HCFA's market basket includes interest expenses, while MedPAC addressed the effects of changes in interest rates through a "policy financing adjustment" in the update framework. Over the past several years, low and stable interest rates have minimized the difference between MedPAC's and HCFA's approaches. Consequently, we have chosen to eliminate this separate adjustment and use HCFA's market basket.<sup>4</sup>

**Correction for previous forecast error**

Because the updates the Congress legislates are based on forecasts, they are

subject to inaccurate estimating, which can make payments too high or low. MedPAC corrects for forecast error when actual data become available, generally two years after the update decision. This adjustment is important because the Congress has not allowed HCFA to adjust payments administratively when more current data become available. To date, MedPAC's correction factor has almost always been negative; for example, HCFA's forecast of inflation in hospital input prices proved to be higher than actual inflation for eight straight years.

**Changes in inputs and product**

The next set of components in our update framework reflects added costs resulting from technological advances, possible savings from producing services more efficiently, and the cost effect of providers unbundling some services encompassed by the unit of payment (episode, discharge, day, or visit). In practice, we cannot precisely distinguish among these factors, but the framework provides a conceptual basis for considering each one. This set of factors addresses the change in inputs needed to deliver patient care while holding input prices and the mix of patients constant.

**Scientific and technological advances net of productivity growth**

Until now, MedPAC's update framework has included separate components for scientific and technological advances (S&TA) and productivity improvement. These two factors have generally been considered together because productivity gains are viewed as funding at least a portion of the costs of quality-enhancing technological advances. This tends to occur, of course, in nearly all sectors of the economy.

2 MedPAC's recommendation on this issue is presented in the hospital inpatient section of Chapter 3.

3 Currently, the Congress legislates an operating payment update, and HCFA implements a capital update through rulemaking.

4 The Commission intends to review some of the constructs of HCFA's market baskets in the coming year, focusing on the treatment of capital cost elements. In addition to using different methods for responding to changes in interest rates, MedPAC and HCFA have disagreed on the method for handling capital asset prices. HCFA's market basket is based on a moving average of depreciation expenses going back 22 years for buildings and fixed equipment and 10 years for movable equipment. MedPAC's market basket reflects a one-year change in asset prices for the coming year.

The provision for the cost effects of S&TA is forward looking; that is, it incorporates anticipated changes rather than historic ones, according to the Commission's analysis and judgment. It is intended to provide for the adoption of technological advances that enhance quality but also raise costs.

An offsetting downward adjustment is made to reflect the savings we expect from fewer or less expensive inputs being used to deliver the product. (In this context, "product" is measured in terms of the unit of payment.) This adjustment is also forward looking, reflecting the judgment that Medicare should require providers to reduce their inputs relative to outputs by at least a modest amount each year and that these reductions can be accomplished without adverse effects on quality of care. The effects of technological advances that reduce costs are accounted for in the productivity adjustment.

While there is little disagreement that both S&TA and productivity play an important role in determining the efficient costs of virtually all health care services, both are difficult to measure. Consequently, the Commission's decisions regarding the S&TA and productivity factors have been highly judgmental.

It has been virtually impossible to develop a single measure of productivity that we believe captures all aspects of input usage, measures a constant output over time, and is not contaminated by unrelated factors.<sup>5</sup> In addition, it is nearly impossible to determine whether a measured reduction in inputs relative to outputs was accomplished without adverse effects on quality, which is a prerequisite to considering the reduction a real productivity improvement.

The best approach for dealing with this problem is to offset our S&TA adjustment with a fixed standard for expected productivity growth. Annually, we will determine whether to make an adjustment for S&TA beyond what can be covered by normal productivity growth. We will publish only the net S&TA factor, which would be zero when targeted productivity improvement exactly offsets the adjustment for S&TA.

Establishing a general productivity growth standard, of course, will be plagued by the same lack of data as our more narrowly focused measurement attempts in the past. Productivity trends in the national economy provide useful input, but in the end, the decision will undoubtedly remain judgmental. Consequently, establishing a fairly low guideline amount is appropriate—perhaps 0.5 percent annual improvement in the hospital sector, possibly lower (but not zero) in sectors such as home health and skilled nursing care, in which labor plays a more dominant role in delivering patient care.

Once the productivity standard has been set, we will not as a general rule attempt to measure sector-specific gains in productivity, instead focusing on technology-related analyses. Our goal will be to identify and analyze areas in which technological change is likely to have the largest impact, with input obtained from literature reviews, expert panels, and industry representatives.

### **Unbundling of the payment unit**

The Commission has reduced its recommended payment update when there is evidence that cost reductions are attributable to unbundling; that is, providers are billing separately for services formerly within the unit of

payment. This phenomenon frequently lowers providers' costs without a corresponding reduction in Medicare's overall payment obligations.

In recent years, the Commission has recommended what we called a site-of-care substitution adjustment for our PPS inpatient update recommendation. This adjustment came in response to evidence that care formerly provided during inpatient stays had been unbundled and shifted to various post-acute providers who were paid separately.<sup>6</sup> In 1987, ProPAC used this mechanism to account for hospitals unbundling diagnostic tests previously performed on the first day of a hospital stay and billing for them separately before admission.

The unbundling adjustment differs from the other two components composing the "changes in inputs and product" set in that it is intended to compensate for past events, not to adjust for factors expected to influence costs in the coming year. When necessary, the adjustment can account for the cumulative effects of unbundling over several years.

Despite the difficulty of measuring the cost impact of unbundling, adjusting for it in the update framework is essential because it can have a substantial effect on Medicare's payments.<sup>7</sup> The financial incentive to cut the length of inpatient stays by transferring patients to other settings is intrinsic to per-discharge payment; in fact, the incentive to unbundle services for separate billing is intrinsic to prospective payment of any kind. Thus, while the Commission's use of the unbundling adjustment has been limited to PPS inpatient services to date, it may well come into play for updating other prospective rates in the future.

5 MedPAC is not the only organization to experience this frustration. The Bureau of Labor Statistics has published productivity measures for nearly all major sectors of the economy. However, due to some of the same problems that have plagued MedPAC's analyses, it has been unable to develop measures for hospitals and other health care providers.

6 Although MedPAC believes that a substantial portion of the decline in hospital lengths of stay during the 1990s was due to a shift in care from acute to post-acute settings, some of the reduction is due to other factors. An example is endoscopic surgery, which allows patients to reach the same level of functioning in less time, compared with invasive surgical techniques.

7 Accounting for unbundling through the updating process spreads the impact of the downward payment adjustment across all cases. Another method of accounting for unbundling in an inpatient setting is to use a graduated per diem payment in place of the normal per-case payment for the specific cases in which unbundling has occurred. This general approach—known as the expanded transfer policy—has been used for the hospital inpatient services covered by Medicare's PPS. As discussed in Chapter 3, MedPAC endorses the expanded transfer policy in combination with the unbundling adjustment in our update framework.

## One-time factors

This component provides the Commission with the flexibility to consider irregular factors outside the control of providers that may have systematic and significant impacts on costs. Last year, for example, the Commission considered the impact of year 2000 computer problems in this category.<sup>8</sup> Other factors could include new financial reporting requirements, safety standards, and taxes.

## Changes in case mix

The final segment of the update framework adjusts for case-mix change, with prices and inputs held constant, to account for changes in patients' real resource requirements over time. The two components of MedPAC's adjustment for case-mix change address the impacts of coding changes (often referred to as upcoding) and real changes in patient needs—complexity—within service classification categories.

## Coding changes across service categories

In a PPS, the resource intensity of the services patients require is measured by a case-mix index, which reflects the distribution across the classification groups used for payment. These groups are constructed using some combination of services provided and patient characteristics. For example:

- The ambulatory payment classifications HCFA will use for its hospital outpatient PPS are based exclusively on services.
- The resource utilization groups used in the SNF PPS are based mostly on services.
- The diagnosis related groups (DRGs) used in the hospital inpatient PPS and the home health utilization groups that HCFA has proposed for home health PPS are based predominantly on patient characteristics.

Increases in a case-mix index automatically raise prospective payments, which is appropriate when the growth results from real change in patient resource requirements. Changes in coding practices, however, can raise or lower the index without any change in resource needs. The Commission attempts to estimate how much of the index growth in the previous year is attributable to changes in coding and recommends an adjustment of that amount for the update. The coding change factor will apply in all of Medicare's PPSs except dialysis, where a single base payment rate is used for all patients.

MedPAC considers this adjustment essential because upcoding is likely whenever prospective payment rates are set using a patient classification system—especially in the first year or two after a PPS is implemented. Upcoding does not necessarily indicate abusive billing practices; it may also result from improvements in medical record documentation and coding technique, which are natural outgrowths of providers learning to classify their patients or adopting to changes in the structure of the classification system.

## Complexity changes within service categories

A change in service complexity within classification groups—reflecting a change in the average severity of illness or other factors—can affect resource needs without a corresponding change in payments. The Commission will recommend an adjustment to the update when it believes this has occurred.

Unlike upcoding, however, changes in within-class complexity over time are often small; therefore, in many cases it may not be necessary to invest the resources needed to measure within-class complexity. Nonetheless, our general framework should include this factor because it may be significant in certain circumstances. For example, ProPAC recommended within-DRG case-complexity adjustments of a full

percentage point or more for hospital inpatient services in the 1980s. The larger change at that time was attributed primarily to the shift of non-complex cases within some DRGs to outpatient settings, raising the average severity level of the remaining cases.

Hospital outpatient and SNF services would appear to be the most likely candidates for significant levels of within-class complexity growth in the near future because broad classification categories are employed for payment and because some of the services can also be provided in other settings. Case-complexity change may also influence costs in dialysis and PPS-exempt inpatient facilities, but we are hampered in our ability to measure it in these settings by the lack of patient classification systems.

---

## Applying the general framework to updating skilled nursing facility payments

---

Medicare has recently implemented a PPS for care in SNFs and the Commission's recommendations for updates to SNF payments will be based on the general update framework discussed above.

Although the update amount is set in law, policymakers will need to know whether the statutory updates are consistent with an analytically informed judgment about how much these rates should increase from one year to another. Over the next year, MedPAC will develop the details of the framework as it applies to SNFs. In 2002, the Commission will have complete cost report data under the PPS to inform its recommended update.

An adjustment for unbundling will not be used for determining update recommendations for SNF payments. SNFs may be on the receiving end of hospitals' unbundling, but because these facilities are paid on a per diem basis, the financial incentives associated with shortening lengths of stay do not appear to

---

<sup>8</sup> Because we had not defined this "one-time factors" category separately as of our March 1999 report, the year 2000 adjustment was combined with our S&TA allowance.

exist. Consolidated billing for all services to SNF patients also makes it unlikely that facilities can unbundle services. The following sections address applicable elements of the update framework. MedPAC will solicit the advice of experts to inform its decisions on several components.

### **Changes in input prices**

HCFA developed a new SNF market basket to generate PPS rates and account for annual changes in input prices, using fiscal year (FY) 1992 data (the most recent year for which relatively complete data were available).<sup>9</sup> The SNF market basket contains 21 items in 6 major expense categories: wages and salaries, employee benefits, contract labor, pharmaceuticals, capital-related costs, and other costs.

The market basket reflects the labor-intensive nature of SNF care; 76 percent of the market basket for FY 1999 is labor related, about 10 percent more than the labor-related share for the PPS hospital combined operating and capital market basket. MedPAC will correct for forecast errors in the SNF market basket as the actual data become available, generally two years after the forecast is made.

### **Changes in inputs and product**

The update adjustment for changes in inputs and product considers an allowance for S&TA net of targeted productivity growth. As it does for other providers, the allowance for the cost effects of S&TA is intended to provide additional funds for SNFs to adopt health care advances that enhance quality but also raise costs. The Commission is concerned about the impact of pharmaceuticals on SNF costs and will therefore focus on this area in studying the effect of S&TA on SNF costs. In addition, in deciding about the S&TA allowance, MedPAC will consider whether technologies are approved by the Food and Drug Administration (FDA), the proportion of SNF patients potentially affected, and treatment costs.

The Commission will develop a standard target for productivity improvement in SNFs, after discussing with experts the extent to which expecting productivity improvement is realistic in such a labor-dependent setting. As stated earlier, once the productivity standard has been set, we will not as a general rule attempt to measure productivity gain but will focus instead on measuring technological change. The productivity improvement target will be deducted from the S&TA allowance.

### **Changes in case mix**

MedPAC will construct a baseline case-mix index (CMI) for SNFs by measuring changes in case mix and estimating the portion of the annual change that is real (reflecting changes in patient resource requirements, rather than improvement in coding). Based on this analysis, the Commission will adjust its update recommendation for coding changes in SNFs.

Determining the amount of CMI change due to real changes versus coding changes will be difficult, and the Commission plans to consult with experts to identify measures of these changes. Because of experience with the hospital PPS, we will focus on coding changes while these facilities are adjusting to being paid prospectively. Studies conducted after the implementation of the DRG classification system generally found that the proportional effect of improved coding was most pronounced following structural changes in the hospital classification system. Many structural changes are already planned for the SNF PPS, including phase-in from 1998 through 2002, temporary increases in payment rates for some case-mix groups in 2000, and refinements to the PPS in 2001. The Office of Inspector General plans a study of the accuracy of coding, which also may inform MedPAC's analysis.

As stated above, complexity changes within case-mix groups may be more evident in SNFs than in some other service units because of the large groups in the PPS. The Commission will examine

Minimum Data Set (MDS) elements for patients within the same case-mix group to determine whether complexity changes within Resource Utilization Groups, Version III (RUG-III) have occurred.

---

## **Updating payments to physicians and ambulatory care facilities**

---

Medicare payments to physicians and ambulatory surgical centers (ASC) are based on fee schedules, and payments to hospital outpatient departments (OPD) will be based on fee schedules later this year. Medicare payment policies require annual updates of these payments, but methods vary. The following discussion considers the importance of achieving consistency in these updates and addresses ways to achieve that consistency.

As explained at the beginning of this chapter, Medicare has experience with two approaches to determining fee-for-service updates. One is an update framework that examines historic trends and future projections for factors expected to affect providers' costs in the coming year. The other is an expenditure target. Policymakers employ expenditure targets when they believe controlling overall expenditures is as important as updating payments to account for changes in providers' costs. To date, only physicians' services have been subject to an expenditure target. However, the Congress has directed HCFA to develop a method for controlling unnecessary increases in the volume of hospital outpatient services, and HCFA has proposed an expenditure target as a possible way to fulfill that requirement (HCFA 1998a).

In addition to accounting for increases in providers' costs while controlling spending, updating payments to physicians and ambulatory care facilities must take into consideration the fact that services may be provided in multiple settings. Making consistent updates

---

<sup>9</sup> The previous SNF market basket, which excluded ancillary and capital-related costs, was inappropriate because the PPS now includes those costs, in addition to the costs of routine services.

among settings may be important if payment differentials lead to undesirable shifts of services among settings.<sup>10</sup>

Concern about update consistency across settings prompted the Commission to recommend a single update mechanism that would link payment updates across all ambulatory care services, including those provided in physicians' offices, OPDs, and ASCs (MedPAC 1999). However, the Commission has recently revisited its position. Based on further analysis and consideration, MedPAC has concluded that, while consistency in updates is conceptually desirable, complex issues must be resolved before that goal can be achieved.

## RECOMMENDATION

**The Congress should not establish a single overall expenditure target that determines payment updates for physicians' services and ambulatory care facilities. Within existing statutory authority, the Secretary should not establish setting-specific expenditure targets.**

Further work is necessary on a method other than an expenditure target that brings about consistency in updates. The following discussion introduces issues that must be resolved before consistency can be achieved. It discusses why consistency in payment updates is desirable and then describes alternative approaches that would bring about this consistency.

### Rationale for consistency in payment updates

Shifts of services among ambulatory care settings—physicians' offices and ambulatory care facilities—can occur for a variety of reasons. Such changes are desirable if they reflect changes in

medical capabilities and technology, patient mix, or practice patterns and if they lead to improved patient outcomes. Consistent payment levels and updates among ambulatory care settings would minimize incentives to shift services among those settings due to financial, instead of patient care, considerations.

To examine the issue of potential shifts among settings, we analyzed physician claims data because physicians provide services in multiple settings.<sup>11</sup> We calculated the shares of spending, by setting, for physicians' services for each of five years (1994–1998) for specific physicians' services offered in at least two of three settings: OPDs, physician offices, and ASCs. Changes in those shares among settings were interpreted as shifts in services.<sup>12</sup>

We examined shifts specific to single services only; that is, shifts from one setting to another with no change in the type of service. (Another type of shift involves replacing one service with another; for example, drug therapy that replaces surgery.)

The results show the potential for shifting services among ambulatory care settings (Table 4-2). In the case of cataract lens replacements, for example, the data suggest that procedures performed in ASCs have replaced procedures performed in OPDs.<sup>13</sup> For other cases—such as echocardiograms and nuclear imaging—data suggest the potential for shifting services from OPDs to physicians' offices. Finally, data suggest that for colorectal endoscopy and upper gastrointestinal endoscopy, decreasing spending shares for services in physicians' offices are offset by increasing spending shares for ASCs.

Such shifts in services may lead to improved patient outcomes. Because of the Commission's concern that financial considerations could lead to undesirable shifts of services, we are beginning to consider alternative approaches to updating payments to physicians and ambulatory care facilities.

### Alternative approaches to updating payments to physicians and ambulatory care facilities

Given the rationale for consistently updating payments to physicians and ambulatory care facilities, what are the options for doing so? The Commission has considered two options: an update framework, similar to those used by MedPAC and HCFA to determine updates for hospital inpatient PPS payments, and an expenditure target, modeled after the SGR system used to update payments under the physician fee schedule.

In considering these options, the Commission has viewed consistency of updates to be distinct from uniformity; using an update framework, changes in input prices could yield consistent updates that would be different for each setting. In contrast, uniform updates would be the same for all applicable settings.

#### Update framework

Payment updates for physicians and ambulatory care facilities could be based generally on MedPAC's update framework. Current updates take into account changes in input prices. Adjustments to payments for changes in inputs and product would require careful thought about how changes in technology and productivity affect ambulatory care, as well as whether unbundling concepts

10 Consistency of updates is part of the broader issue of consistency of payments among settings, which includes the appropriateness of base payment rates, in addition to consistency of updates. As discussed in the introduction of this chapter, the Commission has begun deliberating the appropriateness of some base payment rates, but it is not making any recommendations on those issues in this report.

11 Because physician claims data do not include services provided by residents, the analysis did not consider shifts of services among settings attributable to delivery of these services.

12 In other contexts, the analysis would be a "market share" analysis. Total expenditures for a service would be the market, and each setting's share of expenditures would be its market share.

13 The small share of spending for cataract lens replacement in the office setting represents visits to physicians and other professionals for pre-operative and post-operative care.

## Payment update methods

Medicare's payment update methods vary for physicians' services, hospital outpatient departments, and ambulatory surgical centers.

### Physicians

The Omnibus Budget Reconciliation Act of 1989 required payment for physicians' services under a fee schedule and established the Volume Performance Standard (VPS) system to curb the rise in spending for physicians' services. The VPS system linked payment to growth in the number and mix of services physicians provide.

Each year, the VPS system set target rates of spending growth called performance standards. Two years later, actual spending growth for that year was compared with the target; then, the conversion factors, used to determine payment amounts, were adjusted to hold growth in overall spending to the target rates. These adjustments were called conversion factor updates.

The Balanced Budget Act of 1997 (BBA) replaced the VPS system with a sustainable growth rate (SGR) system, in which updates to physician payments are determined by the Medicare Economic Index and an update adjustment factor. Calculating the update adjustment factor involves comparing actual spending for physicians' services against a target, which is determined by the sustainable growth rate.

Four factors make up the sustainable growth rate:

- the percentage change in input prices for Medicare physicians' services,
- the percentage change in Part B enrollees (excluding those enrolled in Medicare+Choice plans),

- the projected change in real gross domestic product (GDP) per capita, and
- the percentage change in spending for physicians' services resulting from changes in law and regulations (but not due to the SGR system).

The real GDP per capita factor in the SGR allows the target to accommodate increases in the volume and intensity of physicians' services, but only at a rate supported by growth in national income.<sup>14</sup>

The Balanced Budget Refinement Act of 1999 changed the SGR system in several ways. First, calculation of the update adjustment factor was modified to reduce potential oscillation in payment updates. Second, the Secretary was required to revise previously issued SGRs with the best available data, beginning with the SGR for 2000.

Third, the Secretary was required to conduct a study of the use of physicians' services by Medicare beneficiaries, including the effects of improvements in medical capabilities, advancements in scientific technology, and other factors. MedPAC must analyze and evaluate the study and report to the Congress on it. Fourth, the Secretary was required to make available to MedPAC and the public each year an estimate of the SGR and the conversion factor applicable to physician payments for the succeeding year.

### Hospital outpatient departments

Medicare reimburses hospitals for most outpatient services using three different payment methods depending on the type of service: the least of costs or charges; the least of costs, charges, or a blended rate; and a number of fee schedules (for clinical laboratory

services, prosthetics and orthotics, and durable medical equipment).<sup>15</sup>

Originally, Medicare paid for all hospital outpatient department (OPD) services the lesser of costs or charges. However, Medicare has been moving away from this method because it offers no incentives for cost control. In 2000, a prospective payment system (PPS) for OPDs will replace existing payment methods. Under the PPS, services will be classified into Ambulatory Payment Classification (APC) groups, with one payment rate for all services in an APC.

To reduce Medicare's hospital outpatient expenditures, the Congress made across-the-board cuts in both operating and capital payments. In fiscal years 1990 and 1991, Medicare payments for hospital outpatient capital costs were reduced by 15 percent. Since fiscal year 1991, operating payments for hospital outpatient services paid on a cost basis (as well as the cost portion of blended payments) have been reduced by 5.8 percent. This 5.8 percent reduction in payments for operating costs has also been applied to part of the blended payment for radiology, other diagnostic procedures, and ASC-approved surgery. These reductions were set to expire at the end of 1998, but the BBA extended them to December 31, 1999. Since fiscal year 1992, payments for capital have been held at 10 percent below costs each year.

As part of the OPD PPS, the Secretary will update payments using the hospital market basket index, which measures input prices for inpatient hospital care. The Secretary also has the option to use an OPD-specific index computed in the same manner as the hospital market basket index. Finally, the Secretary may adjust the update for unnecessary increases in the volume of services.

*continued on p. 107*

<sup>14</sup> Further details on the SGR system are discussed in MedPAC's March 1999 report to the Congress.

<sup>15</sup> The blended rate combines a fee schedule amount with the lesser of costs or charges.

## Payment update methods

*continued from p. 106*

### **Ambulatory surgical centers**

Since 1980, Medicare's Part B benefit has covered certain surgical procedures provided to beneficiaries in freestanding or hospital-based ambulatory surgical centers (ASCs). ASC-approved procedures were originally assigned to one of four payment groups, with payment for each group calculated from cost and charge data from 40 ASCs. In

early 1990, HCFA increased the number of payment groups to eight, based on 1986 survey data. In 1998, HCFA proposed replacing payments for these eight groups with payments structured in terms of more than 100 APCs. HCFA is expected to implement payment rates, by APC, during 2000.

HCFA is required to annually update the payment rates for procedures on the ASC list. To fulfill this requirement, the

agency rebases the payment rates every five years using data from a survey of a sample of ASCs. For years when payments are not rebased, payment rates are adjusted for inflation. The Social Security Act provides for increasing ASC payment rates by the percentage increase in the consumer price index for urban consumers. The BBA reduced the update by 2 percentage points for fiscal years 1998–2002. ■

apply to the relatively small service units. In addition, framework adjustments for changes in case mix would have to be adapted to account for the fact that ambulatory care payments are based on a service classification system, rather than a case-mix classification system.

Even if the update framework could be applied to physicians' services and ambulatory care facilities, two important issues remain. One concerns coding and service use incentives under the OPD PPS. The other concerns continued use of the SGR system for updating payments to physicians.

### **Implementation of the outpatient department prospective payment system**

For some services, pre-PPS payments to OPDs have been determined on the basis of OPD costs. This payment method was applied retrospectively, on an aggregate basis, during the settlement of the hospitals' Medicare cost reports. This aggregate settlement of payments and costs was not dependent on the specific services provided in OPDs and did not provide hospitals with an incentive to accurately report which services were provided.

Under the OPD PPS, accurate reporting of services provided will become much more important. Payments will depend on the billing code assigned to each service. Each code will be assigned to an Ambulatory Payment Classification (APC) group, and each APC will have a payment rate.

Evaluation and management services, which include visits to OPDs and physicians' offices, illustrate the change in incentives that will occur when the OPD PPS is implemented. Before introduction of the PPS, hospitals were instructed to use one billing code for new patients and another for established patients, regardless of the duration or complexity of a visit (HCFA 1999). Use of other codes, more consistent with the level of service provided, was permitted but not required.

In accordance with instructions received from HCFA, hospitals have been most likely to use the lowest-level code available—99201—when reporting visits by new patients, while physicians are most likely to use a higher-level code—99203—when providing the same types of visits (Figure 4-1). The coding of visits by established patients also differs between OPDs and physicians, although the difference is not as great as that for new patients (Figure 4-2). Still, some shifts in OPD coding seem necessary for their pattern to become more like that for physicians.

The differences in coding of evaluation and management services between OPDs and physicians suggests that introduction of the OPD PPS could lead to increases in payments to OPDs, all other things being equal. Such increases would not reflect changes in OPD costs, but rather changes in coding practices, and would be difficult to distinguish from other factors

influencing payment increases, such as increased use of services.

One way to address changes in coding under the PPS would be to establish a feedback relationship between coding changes and the PPS conversion factors; spending that differed from projections would lead to changes in the conversion factor. HCFA has considered this approach and is planning further study of other options (HCFA 1998a).

### **An update framework and the sustainable growth rate system**

A second issue that must be resolved before an update framework could be used for physicians' services and ambulatory care facilities concerns the SGR system for updating payments to physicians.

The Congress refined the SGR system in the Balanced Budget Refinement Act of 1999 (BBRA) and appears committed to its continued use. Replacing this system with an update framework that does not include an expenditure target for physicians' services does not appear to be consistent with congressional preferences.

A compromise between moving toward an update framework and staying with the current expenditure target approach might focus on applying the update framework to the part of physician payments most analogous to facility payments—the practice expense payments. Practice expense payments are intended to compensate physicians for expenses similar to those of ambulatory care

**TABLE  
4-2**

**Expenditure shares for selected physicians' services provided in ambulatory care settings, by setting, 1994-1998**

Type of service	Percentage of 1998 ambulatory care physicians' services expenditures	Share of physicians' services expenditures within category					Direction of change in share of expenditures
		1994	1995	1996	1997	1998	
Visits, office/outpatient	31.2%						
Office		97.6%	97.3%	97.0%	96.9%	96.9%	decrease
OPD		2.4	2.7	3.0	3.1	3.1	increase
Cataract lens replacement	4.7						
Office		2.3	2.2	2.1	2.7	2.5	increase
OPD		64.5	63.9	62.8	60.6	59.7	decrease
ASC		33.3	33.9	35.2	36.7	37.8	increase
Consultations	4.4						
Office		92.0	92.0	92.0	92.1	92.3	increase
OPD		7.9	7.9	7.9	7.8	7.7	decrease
Routine diagnostic radiology	3.9						
Office		66.7	66.2	67.6	66.5	68.3	increase
OPD		33.2	33.7	32.3	33.4	31.6	decrease
Therapeutic radiology	3.2						
Office		60.3	61.2	62.2	64.2	65.9	increase
OPD		39.7	38.7	37.8	35.8	34.1	decrease
Echocardiograms	2.7						
Office		82.2	85.2	87.5	87.8	88.3	increase
OPD		17.8	14.8	12.5	12.2	11.6	decrease
Electrocardiograms	2.6						
Office		83.3	80.9	81.7	81.9	82.0	decrease
OPD		16.6	19.0	18.3	18.1	18.0	increase
Magnetic resonance imaging	2.3						
Office		84.7	84.3	85.0	85.2	84.9	increase
OPD		15.3	15.7	15.0	14.7	15.1	decrease
CAT scans	2.2						
Office		51.4	50.4	51.6	51.9	51.9	increase
OPD		48.6	49.6	48.4	48.1	48.1	decrease
Nuclear imaging	2.0						
Office		65.7	69.9	74.9	77.9	80.2	increase
OPD		34.3	30.1	25.1	22.1	19.8	decrease
Colorectal endoscopy	2.0						
Office		22.9	19.8	18.1	16.2	14.1	decrease
OPD		67.8	69.2	69.6	69.9	70.7	increase
ASC		9.3	11.1	12.3	13.8	15.2	increase
Ultrasound imaging (non-cardiac)	1.4						
Office		81.9	82.1	82.0	81.4	80.5	decrease
OPD		17.9	17.8	17.9	18.3	19.3	increase
Upper GI endoscopy	0.9						
Office		9.8	8.5	7.3	7.1	6.2	decrease
OPD		81.7	80.6	80.4	79.8	80.3	decrease
ASC		8.5	10.9	12.2	13.1	13.6	increase
Cardiac catheterization	0.6						
Office		11.7	14.6	14.8	17.3	17.4	increase
OPD		88.1	85.2	84.9	82.4	82.2	decrease
Arthroscopy	0.4						
Office		1.9	1.7	1.6	1.5	1.7	decrease
OPD		85.1	86.4	84.7	84.9	83.2	decrease
ASC		12.9	11.9	13.7	13.6	15.1	increase
Total	64.5						

Note: Data are from the first six months of each year. OPD (outpatient department), ASC (ambulatory surgical center), CAT (computerized axial tomography), GI (gastrointestinal).

Source: MedPAC analysis of 1994-1998 Medicare physicians' service claims, 5 percent sample of beneficiaries.

## Understanding shifts of services to ambulatory surgical centers

One factor influencing shifts of services to ambulatory surgical centers (ASCs) is capacity: The number of facilities has grown rapidly. From 1993 to 1997, the number of Medicare-certified ASCs increased from 1,715 to 2,470, an average annual increase of 9.5 percent.

Another factor is ongoing changes in the delivery of medical care. Three types of procedures—arthroscopy, endoscopy, and cataract lens replacement—illustrate these changes.

### Arthroscopy

Changes in practice patterns are a primary reason for the increase in the volume of arthroscopic procedures. Arthroscopy, used to diagnose and treat joint problems and most commonly performed on the knee, has virtually replaced open-joint surgery for most indications. Arthroscopy is generally a less invasive, more accurate, and more precise method of diagnosis. It frequently allows very early post-operative ambulation, is generally associated with fewer complications, and is less costly if hospitalization is unnecessary. Because this procedure is less invasive and has a lower complication rate, more doctors are

likely to recommend it, and a larger number of patients are likely to undergo it, even for less severe symptoms. Although most arthroscopic procedures are performed in outpatient departments, the share performed in ASCs is growing (Abt Associates 1993).

### Endoscopy

Colonoscopy and upper gastrointestinal (GI) endoscopic procedures have increased in volume due to advances in technology, changes in practice patterns, increases in capacity to provide these services, and changes in patients' attitudes. Endoscopes allow physicians to diagnose and treat upper and lower GI tract problems. Several technological advances have allowed for more accurate and less invasive procedures. For example, the flexible fiberoptic scope replaced rigid scopes in the mid-1970s. Video devices and surgical accessories have also permitted better diagnosis and treatment. Changes in practice patterns—such as the general decrease in the use of contrast radiologic studies as diagnostic tools—have also influenced volume growth of endoscopic procedures. Additionally, a greater understanding of colon cancer

and events that increase the malignant potential of colonic polyps has led to a greater willingness to recommend sigmoidoscopy for cancer screening purposes.

The number of physicians performing these procedures has also increased dramatically, especially for the lower GI tract. At least half of all family and general practitioners, as well as internists, are trained in flexible sigmoidoscopy (ACS 1990).

### Cataract lens replacement

Cataract lens replacement has been influenced by technological advancement and the aging of the population. Microsurgery and ultrasound techniques permit surgeons to make smaller incisions, reducing time required for post-operative recovery. Meanwhile, as technology lowers the threshold for recommendation and acceptance of surgery, the number of candidates for surgery has increased. This is occurring because of the aging of the U.S. population and because age is strongly correlated with cataract risk. ■

facilities—nonphysician clinical staff, administrative staff, rent, supplies, and equipment. Using an update framework for these payments could improve consistency across settings while leaving the SGR to control growth in payments for physicians' work and professional liability insurance (PLI) expenses.<sup>16</sup>

In considering this option for updating payments, policymakers should be aware that it could lead to differences in the two physician fee schedule conversion factors.

For example, if separate updates had been implemented for physician payments in 2000, the practice expense conversion factor would have increased by 2.4 percent, the Medicare Economic Index (MEI) for 2000.<sup>17</sup> The work and professional liability insurance conversion factor would have increased by the MEI of 2.4 percent, plus an update adjustment factor of 5.2 percent, for a total increase of 7.6 percent.<sup>18</sup> After the increases, the conversion factors would have been \$35.56 for practice expenses and \$37.37

for work and PLI. These conversion factors could become quite different over time.

The Commission has not yet reached a conclusion on the advisability of separate updates for different components of the physician fee schedule.

### Expenditure targeting

An expenditure target is another option for updating payments to physicians and ambulatory care facilities. In contrast to

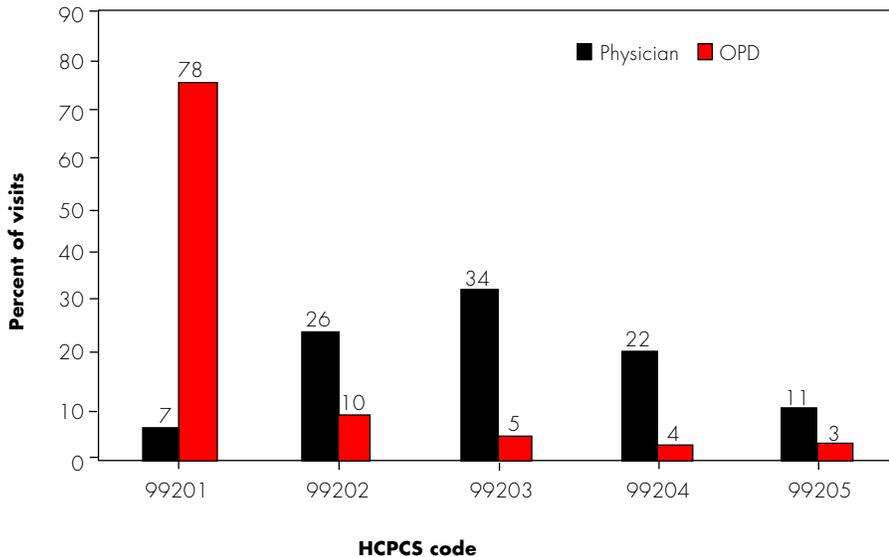
16 An update framework that included PLI expenses, in addition to practice expenses, could also be considered.

17 For purposes of illustration, this example assumes a simple update framework consisting only of an input price index and not other factors, such as case-mix change.

18 The update adjustment factor in this example assumes no change in the current statutory limit on increases in the fee schedule conversion factor. That limit is MEI plus 3 percentage points. Because the share of total physician fee schedule payments attributable to work and PLI is only 0.577, the limit becomes 5.2 percent (3/0.577) when applied to work and PLI.

**FIGURE 4-1**

**Distribution of codes for visits by new patients to physicians and outpatient departments, 1998**

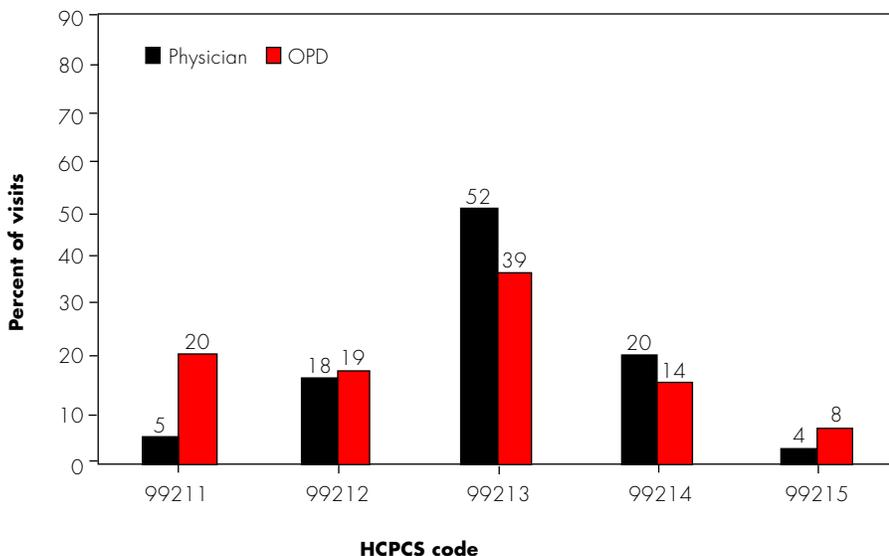


Note: OPD (outpatient department), HCPCS (Health Care Financing Administration Common Procedure Coding System). OPD data are from the full year; physician data are from the first six months of the year. These HCPCS codes are used to bill for office and other outpatient visits. They are on an ascending scale that measures the providers' complexity of decisionmaking and the comprehensiveness of the history and examination.

Source: MedPAC analysis of 1998 Medicare claims, 5 percent sample of beneficiaries.

**FIGURE 4-2**

**Distribution of codes for visits by established patients to physicians and outpatient departments, 1998**



Note: OPD (outpatient department), HCPCS (Health Care Financing Administration Common Procedure Coding System). OPD data are from the full year; physician data are from the first six months of the year. These HCPCS codes are used to bill for office and other outpatient visits. They are on an ascending scale that measures the providers' complexity of decisionmaking and the comprehensiveness of the history and examination.

Source: MedPAC analysis of 1998 Medicare claims, 5 percent sample of beneficiaries.

Medicare's other fee-for-service payment systems, the Congress has chosen this option for updating payments to physicians. The Congress has also given the Secretary of Health and Human Services the authority to use an expenditure target when updating payments under the new OPD PPS.

As discussed earlier, updating payments with an expenditure target is very different from updating payments with an update framework. Using an expenditure target, the focus of the update process shifts from factors influencing changes in providers' costs to issues related to spending control and the factors that should be used to determine the target. In the case of physicians' services and ambulatory care facilities, setting a target is further complicated by the goal of achieving consistency in updates across settings.

To illustrate how an expenditure target could serve as a mechanism for achieving consistency in updates for physicians' services and ambulatory care facilities, MedPAC has considered modifying the SGR system for this purpose. The Commission's work shows that modifying the SGR system to include OPDs and ASCs would be difficult. Two issues—the process for setting the target and the magnitude of the target—are important.

**Process for setting an expenditure target**

An expenditure target system requires a process for setting the target. Under the SGR system, the Congress specified a formula in the BBA. It is not known whether that formula would yield an appropriate target if ambulatory care facilities were added to the system.

Under an expanded SGR system, the process for setting the target would need to accommodate shifts in the site of care from inpatient to ambulatory care settings. A service such as cholecystectomy, for example, can be provided in an inpatient setting or, in the case of a laparoscopic cholecystectomy, in an ambulatory care setting.

To illustrate the importance of shifts in the site of care, the Commission analyzed physician claims data for 1994–1998 to address two questions: Is care shifting

**TABLE  
4-3**

**Expenditure shares for high-volume physicians' services provided in inpatient and ambulatory care settings, 1994-1998**

Type of service	Percentage of 1998 physicians' services expenditures	Share of physicians' services expenditures in ambulatory care settings					Change 1994-1998	Shift to ambulatory care
		1994	1995	1996	1997	1998		
Consultations	6.2%	37.9%	39.5%	40.8%	41.9%	42.9%	5.0%	Decelerating
Routine diagnostic radiology	3.1	72.0	72.8	74.2	73.7	75.5	3.5	Accelerating
Echocardiograms	2.2	63.0	68.7	73.9	74.6	75.9	12.9	Decelerating
Electrocardiograms	2.0	75.4	76.2	77.5	78.4	79.5	4.1	Accelerating
CAT scans	1.8	68.7	69.9	71.2	71.9	72.6	3.9	Decelerating
Magnetic resonance imaging	1.5	89.3	90.0	91.0	91.3	91.0	1.7	Decelerating
Colorectal endoscopy	1.5	78.8	79.2	80.1	79.9	81.5	2.7	Accelerating
Nuclear imaging	1.4	76.3	80.1	84.0	85.9	87.5	11.2	Decelerating
Cardiac catheterization	1.1	22.6	25.4	27.4	30.4	32.3	9.7	Decelerating
Upper GI endoscopy	1.0	49.9	51.2	51.7	51.7	53.6	3.7	Accelerating
Ultrasound imaging (non-cardiac)	1.0	85.5	86.6	87.4	87.6	87.9	2.4	Decelerating
Angioplasty	0.7	3.5	3.9	4.2	5.5	7.9	4.4	Accelerating
Cholecystectomy	0.4	NA	25.7	29.9	34.5	39.4	13.7	Accelerating
Arthroscopy	0.2	85.3	87.0	88.1	88.7	91.1	5.8	Accelerating
Transurethral prostate surgery	0.2	11.4	14.7	16.4	18.9	21.1	9.7	Decelerating
Total	24.3							

Note: Data are from the first six months of each year. Ambulatory care settings include physicians' offices, hospital outpatient departments, and ambulatory surgical centers. CAT (computerized axial tomography), NA (not available), GI (gastrointestinal), Decelerating (decelerating shift to ambulatory care), Accelerating (accelerating shift to ambulatory care). A decelerating (accelerating) shift to ambulatory care means the change in share from 1997-1998 is less (greater) than the average annual change from 1994-1997. The cholecystectomy share of expenditures is not available for 1994 due to a change in the coding of laparoscopic cholecystectomy. The change in this services' share of expenditures was calculated with 1995 as the baseline. Percentages of 1998 physicians' services expenditures apply to all settings in which services are provided, not just the ambulatory care setting.

Source: MedPAC analysis of 1994-1998 Medicare physicians' services claims, 5 percent sample of beneficiaries.

from the hospital inpatient setting to ambulatory care settings? If so, are shifts accelerating or decelerating?

Excluding services generally provided in only one setting, a number of high-volume physicians' services are moving from the inpatient setting to one or more ambulatory care settings (physicians' offices, OPDs, and ASCs), although shifts in the site of care are complex and variable (Table 4-3). A rigid formula for calculating expenditure targets, such as that in the SGR system for physicians' services, is not likely to adequately accommodate such shifts. For example, from 1997 to 1998, the share of spending for cholecystectomy in ambulatory care settings grew from 34.5 percent to 39.4 percent. Other services experienced similar but smaller shifts in spending.

The shift of services to ambulatory care settings appears to be accelerating in some cases but decelerating in others. In the case of angioplasty, for example, in 1998, 2.4 percent of total spending for this service moved to ambulatory care settings, the highest increase in three years. Given that the fraction of spending for angioplasty in ambulatory care settings is low—only 7.9 percent in 1998—the shift toward ambulatory care could continue for some time. For other services, the shift toward ambulatory care settings is slowing. Magnetic resonance imaging (MRI) is a good example. In 1998, about 91 percent of spending for physicians' services associated with MRIs was attributable to use of the service in ambulatory care settings. This high fraction leaves little potential for further shifts to ambulatory care.

No one ambulatory care setting appears to be the primary recipient of services shifting from inpatient settings, although five services are experiencing relatively large shifts to ambulatory care: echocardiograms, nuclear imaging, cardiac catheterization, cholecystectomy, and transurethral prostate surgery. For these services, no one ambulatory care setting dominates in terms of spending growth (Table 4-2). For cholecystectomy and transurethral prostate surgery, all of the shift to ambulatory care is to OPDs, the only ambulatory care setting in which the services are provided. The other three services show the strongest spending growth in the office setting.

**Magnitude of an expenditure target**

Deciding the magnitude of the expenditure target would complicate expansion of the SGR system for

## Simulating an expenditure target system for physicians' services and ambulatory care facilities

The Commission's simulations of an expenditure target system for physicians' services and ambulatory care facilities are based on estimates of baseline spending, target spending, and actual spending under current policy.

### Baseline spending

For the first year, the Commission assumed \$49 billion in spending for physicians' services, \$16.7 billion for care in outpatient departments (OPDs), and \$1.1 billion for care in ambulatory surgical centers (ASCs).

### Target level of spending

We assumed growth in real gross domestic product (GDP) per capita of 1.5 percent per year; growth in input costs (as would be measured by the Medicare Economic Index) of 2.0 percent; and fee-for-service enrollment growth of 0.1 percent, for a total of 3.6 percent.

We simulated target expenditures by projecting baseline expenditures forward using our estimate of the sustainable growth rate (SGR).

### Comparing spending under current policy and an expenditure target

We compared our projections of spending under an expenditure target with projected spending under current policy. To estimate spending under current policy, we used growth rate projections from HCFA's Office of the Actuary (OACT).

For physicians' services, OACT projects spending growth under the physician fee schedule to average 4.6 percent annually from 1999–2009. To project spending under current policy, we applied this growth rate to our baseline spending estimate of \$49 billion.

For OPDs, OACT projects spending growth of 8.8 percent from 1999–2009.

To estimate program spending under current law over the same period, we multiplied our OPD baseline spending estimate of \$16.7 billion by 53 percent to count only program (and not beneficiary) spending in the base year. Next, we projected the resulting \$8.9 billion base amount forward using OACT's 8.8 percent growth rate.

Beneficiary spending for OPD services will not grow as quickly as program spending over the same period because of Balanced Budget Act of 1997 policies that reduce beneficiary coinsurance liability. For our simulation, we assumed annual growth in the use of OPD services of 6.5 percent. This fraction is OACT's 8.8 percent projected increase in program payments, minus 2.3 percentage points (MedPAC's hospital market basket forecast for 2000) to account for changes in input prices. We assumed beneficiary spending would grow at the same rate as service use, or 6.5 percent, and used this fraction to project beneficiary spending under current policy by applying this growth rate to the beneficiary share of baseline OPD spending: 47 percent of \$16.7 billion, or \$7.8 billion. Our estimate of total spending for OPD services was the sum of program and beneficiary spending.

For ASC services, we assumed spending would grow 12.9 percent annually under current law based on trends from 1992–1997.

### Results

Assuming no expansion of the SGR to include services other than those provided by physicians, the difference between an SGR of 3.6 percent and projected growth in spending for physicians' services of 4.6 percent means that the conversion factor for the physician fee schedule will generally include a performance adjustment of -1.0 percent through 2009.<sup>19</sup>

Adding OPDs and ASCs to the SGR system, without a compensating increase in the system's expenditure target, would reduce the updates for all services in the expanded system. The difference between an SGR of 3.6 percent and projected growth of 5.6 percent in combined spending for physicians' services, OPDs, and ASCs, means that the typical update for the physician fee schedule's conversion factor would include a performance adjustment of -2.0 percent through 2009, which is 1 percentage point lower than the expected decrease without OPDs and ASCs included in the SGR system.

Assuming no change in growth of use of services for care in OPDs and ASCs, the updates for these facilities would also be affected by the difference between target and actual spending. Updates for both types of facilities would require performance adjustments that decrease payment rates by 2.0 percent.

These simulation results assume growth in OPD expenditures of 7.7 percent and growth in the total of expenditures for physicians' services, OPDs, and ASCs of 5.6 percent. Although all such growth projections are uncertain, the OPD projections are more so because of the influence OPD expenditures are expected to have during the initial years after the OPD PPS is introduced. Given this uncertainty, the Commission simulated the effects of alternative expenditure growth assumptions (Table 4-4), which ranged from 4.7 percent to 10.7 percent for OPDs and from 4.8 percent to 6.6 percent for the combination of physicians' services, OPDs, and ASCs. Under these alternative assumptions, performance adjustments would range from -1.2 percent to -3.0 percent. ■

<sup>19</sup> The performance adjustment increases or decreases updates to the conversion factor to account for differences between actual spending and the expenditure target.

**TABLE  
4-4**

**Simulated effects of  
an expanded  
sustainable growth  
rate system**

<b>Expenditure growth</b>	<b>Performance adjustment</b>
4.8%	-1.2%
5.9	-2.3
6.6	-3.0

Note: Expenditure growth includes physicians' services, outpatient departments, and ambulatory surgical centers. A performance adjustment increases or decreases an update to account for actual expenditures below or above an expenditure target.

Source: MedPAC analysis.

physicians' services to include OPDs and ASCs. The target must be large enough to accommodate growth in beneficiary use of needed services, yet not so large as to permit undesirable spending growth.

The Commission has already raised questions about the SGR as it applies to physicians' services. In its March 1999 report to the Congress, the Commission

recommended revising the SGR to include an additional allowance for cost increases due to improvements in medical capabilities and advancements in scientific technology (MedPAC 1999). This change would be analogous to an S&TA adjustment under the Commission's update framework. Expanding the SGR system to include OPDs and ASCs would necessitate further review of the factors in the SGR. Spending for OPD and ASC services has been growing at rates of 9 percent or more in recent years (MedPAC 1999), but the SGRs announced for 1999 and 2000 have been -0.3 percent and 2.1 percent, respectively.

To illustrate the potential impact of using an expenditure target to determine spending both for physicians' services and ambulatory care facilities, the Commission simulated spending under an expanded SGR system over the 10-year period through 2009. Results suggest that expanding the SGR system to all ambulatory care settings would reduce payments for individual services by about 1 percent per year, or 10.5 percent over 10 years, with this reduction driven by the rapid growth of OPD and ASC spending relative to the current sustainable growth rate.

Thus, a simple expansion of the existing SGR system to include ambulatory care facilities would yield an expenditure target that is below projected spending. This finding, combined with the need to accommodate complex and variable shifts of care from inpatient to ambulatory settings, leads the Commission to conclude that an overall expenditure target for physicians' services and ambulatory care facilities would not be appropriate.

In addition, the Commission has concluded that multiple expenditure targets applicable to specific settings, such as physicians' offices, OPDs, and ASCs, are not advisable either. This conclusion is based on findings showing the potential for shifts of services among ambulatory care settings. The Secretary has the authority to establish such a target for OPDs, which would be separate from the existing one for physicians' services. However, the Commission believes that such narrowly based targets do not promote the goal of achieving consistency in payment updates among ambulatory care settings. Instead, they could lead to undesirable shifts of services among settings that are influenced by financial considerations. ■

## References

---

Abt Associates, Inc. Exploring the growth of hospital outpatient surgeries, E-93-03. Washington (DC), AA Inc. Report to the Prospective Payment Assessment Commission under contract No. T-759633393. March 1993.

American Cancer Society. 1989 survey of physicians' attitudes and practices in early cancer detection, CA: A cancer journal for clinicians. March-April 1990, Vol. 40, No. 2, p. 77–101.

Board of trustees, Federal Supplementary Medical Insurance Trust Fund. 1999 Annual report. Washington (DC), FSMITF. March 30, 1999.

Health Care Financing Administration, Department of Health and Human Services. Medicine Hospital Manual, No. 10. Baltimore (MD), HCFA. December 1999.

Health Care Financing Administration, Department of Health and Human Services. Medicare program: Prospective payment system and consolidated billing for skilled nursing facilities; update; final rule and notice, Federal Register. July 31, 1999, Vol. 64, No. 146, p. 41643–41683.

Health Care Financing Administration, Department of Health and Human Services. Medicare program: Prospective payment system for hospital outpatient services; proposed rules, Federal Register. September 8, 1998a, Vol. 63, No. 173, p. 47552–48036.

Health Care Financing Administration, Department of Health and Human Services. Medicare program: Prospective payment system and consolidated billing for skilled nursing facilities; final rule, Federal Register. May 12, 1998b, Vol. 63, No. 91, p. 26251–26316.

Medicare Payment Advisory Commission. Report to the Congress: Medicare payment policy. Washington (DC), MedPAC. March 1999.

Prospective Payment Assessment Commission. Report and recommendations to the Secretary, U.S. Department of Health and Human Services. Washington (DC), ProPAC. April 1, 1985.

U.S. Congress. Conference agreement on Medicare provisions incorporated by reference into H.R. 3194, District of Columbia Appropriations Act, which were introduced as H.R. 3426, the Medicare, Medicaid, and SCHIP Balanced Budget Refinement Act of 1999. November 17, 1999.

CHAPTER 5

---

**Medicare+Choice: trends since  
the Balanced Budget Act**

---

## Medicare+Choice: trends since the Balanced Budget Act

The Congress had two explicit goals when it created the Medicare+Choice program as part of the Balanced Budget Act: (1) To provide beneficiaries with more choice of plan options, similar to that available in the private sector and the Federal Employees Health Benefits Program, and (2) to help control the growth in Medicare spending (U.S. Congress 1997). Balanced Budget Act proponents had other implicit goals. Some members of the Congress wanted to see the Medicare+Choice plans provide beneficiaries with benefit packages richer than the traditional Medicare fee-for-service package, particularly with respect to outpatient prescription drugs. Other policymakers wanted to see continual, rapid enrollment increases in Medicare+Choice plans to help set the stage for possible future changes in the structure of Medicare.

### In this chapter

- Barely moving toward congressional goals
- Why is it so hard to realize the Congress's goals?
- Addressing barriers to program goals through the Balanced Budget Refinement Act
- Will the Balanced Budget Refinement Act changes help achieve the Congress's goals for the Medicare+Choice program?

Since the passage of the Balanced Budget Act (BBA), progress toward these goals has been halting. The availability of plan options has not increased; most beneficiaries in rural areas still cannot enroll in Medicare+Choice (M+C) plans; benefit packages have become less generous; and enrollment growth in M+C plans has slowed. However, the rate of increase in program payments per beneficiary has decreased.

In the Balanced Budget Refinement Act of 1999, the Congress enacted new measures to help the M+C program realize its goals. In this chapter we analyze the M+C program's progress and discuss how these changes may affect future progress.

## Barely moving toward congressional goals

The BBA introduced many changes to Medicare and created the Medicare+Choice program. In this section we discuss the program since the BBA and how the BBA's changes relate to the Congress's goals.

## Controlling Medicare spending

The BBA has been successful in controlling the growth in Medicare spending; per capita spending actually has decreased since its enactment. The majority of savings has come from provider payment reductions in the traditional Medicare fee-for-service (FFS) program, but some BBA provisions also restricted the payment rate growth for M+C plans. Among these provisions were a reduction in the national update of 0.8 percent in 1998, a further reduction of 0.5 percent in 1999, an assessment for education charges borne by HCFA to inform beneficiaries about the M+C program (about 0.3 percent of payments), and a gradual removal of payments for graduate medical education, which previously had been considered part of the base payment amounts (see text box for a description of M+C payment rate methodology). Although no provision sought to increase the overall payment rates for M+C plans, the floor provision did increase payment

**TABLE 5-1**

### Medicare+Choice contract terminations and service area reductions

	January 1999	January 2000
Terminations	45	41
Service area reductions	54	58
Enrollees who could not stay in their plans	407,000	327,000
Enrollees in counties where all plans withdrew	50,000	79,000

Source: HCFA announcements, December 8, 1998, and July 15, 1999.

rates for some counties, and the blend provision redistributed payments, generally from higher- to lower-payment areas.

## Providing more plan options for beneficiaries

The M+C program can increase plan options for beneficiaries in two ways. It can extend operations of Medicare HMOs to new areas of the country and increase the number of active plans in existing markets. It also can introduce new types of plans to the program. Neither has occurred.

## Withdrawals of existing Medicare+Choice plans

A substantial number of health plans have withdrawn from the M+C program over the past two years. In January 1999, there were 45 terminated contracts and 54 service area reductions (Table 5-1). Of 310 M+C contracts in existence in July 1999, 41 were terminated effective January 2000. Another 58 contractors reduced their service areas by withdrawing from at least one county. These changes meant that in 1999 about 405,000 beneficiaries could not stay in the M+C plans in which they were enrolled in July 1998. At the beginning of 2000, about 327,000 M+C enrollees were in the same circumstance. The plan withdrawals for 2000 were not evenly distributed; 4.5 percent of enrollees in counties getting the floor payment rates lost their plan, compared with 2.4 percent of enrollees living in counties with M+C payment rates above \$550 per month.

Counties in which all available plans withdraw are a particular concern in view of the Congress's goal to provide more choice to beneficiaries. All available plans

withdrew from 105 counties for 2000, leaving more than 79,000 M+C enrollees with no M+C alternative. These beneficiaries had to move into the traditional FFS Medicare program, unless they moved to a county with M+C plans. For 1999, HCFA announced that all plans withdrew from 72 counties, affecting about 50,000 enrollees.

When BBA was enacted in 1997, plans were still joining the program and 74 percent of beneficiaries had access to at least one M+C plan in 1998 (Table 5-2). Access dropped to 71 percent of beneficiaries in 1999 and to 69 percent in 2000. Approximately one million fewer beneficiaries have access to an M+C plan in 2000 than had access in 1999, and two million fewer than had access in 1998.

## Lack of new products

The BBA expanded plan options to allow four new types of plans: provider sponsored organizations (PSOs), preferred provider organizations (PPOs), private fee-for-service plans, and plans attached to medical savings accounts (MSAs). Almost

**TABLE 5-2**

### Beneficiaries with risk plans available, 1997-2000

	1997	1998	1999	2000
Total	67%	74%	71%	69%

Note: Puerto Rico is excluded from the analysis.

Source: MedPAC computations based on HCFA public data.

## Medicare+Choice payment rates

Before the BBA, county payment rates (per beneficiary, per month) were based on the fee-for-service costs of Medicare beneficiaries in that county. The BBA established a new payment methodology, under which the county M+C rate is the maximum of:

- a floor rate
- a minimum update applied to the previous year's rate
- a blended rate.

The **floor rate** was set to \$367 for 1998 and is increased by an update factor equal to the projected growth in Medicare expenditures per capita each year thereafter. For 1999 and 2000 the update factor was decreased slightly each year to calculate the floor payment. As a result, the floor payment for 1999 was \$380; for 2000, \$402.

The **minimum update** is 2 percent.

The **blended rate** combines a national rate and the local rate. It is intended to reduce the variation in payments across the country by lowering the highest rates and increasing the lowest rates. Blended rates are phased in over six years. In 1998, the blend is 10 percent national and 90 percent local; by 2003, the blend becomes 50 percent national, 50 percent local and continues at that mix thereafter.

The actual computation of blended rates is complicated by several factors and the application of those rates is limited by a budget neutrality provision, which essentially limits total spending (resulting from the sum of the floor, minimum, and blend rates) to

what it would have been if county payments were based strictly on local rates. That provision resulted, for example, in no blended rates being applied in 1998 or 1999.

Other factors that complicate the blend calculation are:

- the graduate medical education (GME) adjustment. Local rates are decreased by a percentage of 1997 GME spending, beginning with 20 percent in 1998 and increasing 20 percentage points a year to 100 percent of GME spending by 2002.
- the update factor. Local rates for each year are calculated by multiplying the previous year's local rate by the update factor mentioned above. The BBA decreased the update factor by 0.008 in 1998 and by 0.005 from 1999 to 2002. The BBRA changed the reduction to 0.003 for 2002.
- input-price adjustment. National rates will be input-price adjusted for blending.

The national rate is the average of the local rates, weighted by the number of Medicare beneficiaries in each county. According to the phase-in schedule, that national rate is input-price adjusted and blended with the local rates to come up with the blended rate per county. If the budget neutrality provision permits, that rate becomes the blended rate per county that is then compared with the floor rate and minimum update to determine the actual county M+C payment rate. ■

no progress has been made toward the availability of these new types of M+C plans. The BBA set up a waiver process to encourage the development of PSO plans, but potential PSO plans said the process did not eliminate enough of the regulatory burden faced by HMOs. Instead, PSOs in the M+C program operate under HMO licences. At this time, there is only one PSO operating under a waiver. In addition, several PSOs that had been operating under the Medicare Choices demonstration project have withdrawn from the project.

The BBA also allows PPOs to become M+C plans. However, PPOs have complained that they are not structured to meet the quality requirements developed by the Health Care Financing Administration (HCFA) under the authority of the BBA. Although other factors also may be in play, no PPOs have become M+C plans.

The BBA introduced the possibility that private fee-for-service plans could become M+C plans. To date, no private FFS plans have joined, but one application for a plan awaiting HCFA approval would cover parts of 30 states. The BBA also provided for the creation of M+C plans attached to MSAs. As yet, there have been no MSA plan applications.<sup>1</sup>

### Bringing alternatives to the traditional program to rural and other markets

The M+C program has not been successful in expanding plan option choice to Medicare beneficiaries in general. Further, the BBA has not yet been successful in bringing new choices to areas lacking Medicare risk plans in the past. The differences in plan availability across M+C payment rate groups is striking (Table 5-3). Only 15 percent of beneficiaries in counties at the 2000 floor rate of \$401.61 (for aged beneficiaries) have a plan available, while 97 percent of beneficiaries in counties with rates above \$550 have access to plans.

<sup>1</sup> Section 552 of the BBRA directed MedPAC to study the lack of MSA participation and report to Congress in 2000 on specific legislative changes to make MSA plans a viable option under the M+C program.

**TABLE  
5-3**

**Availability of plans with selected benefits, 1999–2000**

	Total eligible beneficiaries (millions)	Any plan		Zero-premium plan		Plan with Rx coverage		Zero-premium plan with Rx	
		1999	2000	1999	2000	1999	2000	1999	2000
National	39	71%	69%	61%	53%	65%	64%	54%	45%
County rate per month									
\$401.61 (floor)	4	14	15	5	3	12	12	3	2
\$401.62–\$449.99	12	50	47	29	18	39	40	18	14
\$450–\$550	14	86	81	78	67	81	76	70	52
More than \$550	10	97	97	97	94	96	96	95	91
Rural areas	9	23	21	14	9	19	16	8	6
Urban areas	30	86	83	75	66	80	79	68	57

Source: MedPAC analysis of Medicare Compare data from HCFA website, August 1999 and January 2000.

The lack of availability of M+C plans in rural areas continues to be a concern. While 83 percent of beneficiaries living in urban counties have plans available, only 21 percent of those residing in rural counties have access. Withdrawals for 2000 hit rural enrollees especially hard; 18 percent of them lost their plans. Over the past year, the Commission staff has discussed plan withdrawals and rural Medicare issues with policy analysts and representatives of health plans. These discussions indicate that Medicare HMOs are unlikely to move into more rural areas in the foreseeable future, as is discussed later in this chapter.

### Encouraging enrollment and richer benefit packages in Medicare+Choice plans

While overall M+C enrollment is higher than ever—accounting for 16 percent of the Medicare population—it is clear that the BBA has not yet produced the rapid increase in enrollment that policymakers expected. Instead, the growth in M+C enrollment slowed to 5 percent in 1999, from a high of more than 35 percent in 1995 (Figure 5-1).

Plan availability and the richness of benefits in the plans affect enrollment. Coupled with the decrease in overall plan availability, plans continuing in the M+C program have reduced average benefit packages and increased premiums. On average, people enrolled in a plan in 1999 that is still available in 2000 face a premium increase of \$11 per month for the basic benefit package (from \$5 in 1999 to \$16 in 2000) if they want to stay with that same M+C organization. For beneficiaries willing to switch organizations to pay a lower premium, the average minimum monthly premium in areas with at least one M+C plan increased from \$6 in 1999 to \$9 in 2000. Further, both the availability of zero-premium plans and of zero-premium plans that provide any outpatient drug coverage have fallen (Table 5-3).

The familiar patterns of availability along payment level and urban/rural groupings are magnified for the availability of zero-premium plans. In 2000, only 3 percent of beneficiaries living in counties with payment rates at the floor level have a zero-premium plan available, while 94 percent of beneficiaries in counties with rates of more than \$550 have such plans available. Two-thirds of beneficiaries in urban counties have access to a zero-premium

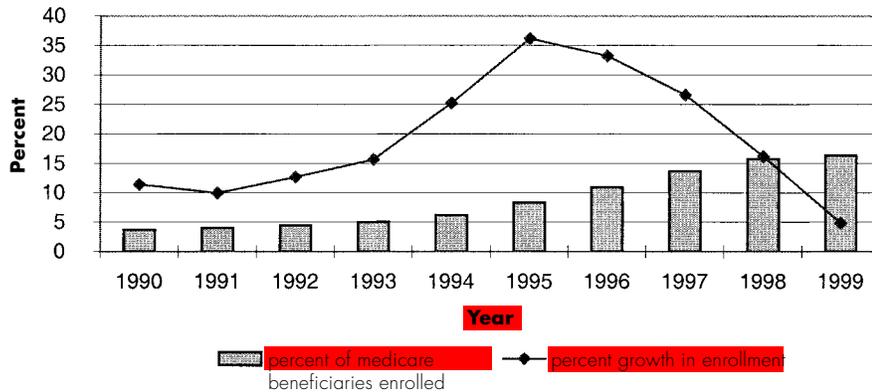
plan, while only 9 percent of rural beneficiaries do. Similarly, 79 percent of urban beneficiaries have access to a plan that offers some outpatient prescription drug coverage, while 16 percent of rural beneficiaries have such a plan available.

### Why is it so hard to realize the Congress's goals?

Achieving all of the Congress's goals simultaneously has been difficult because they are partially at odds. For example, there is a basic conflict between the goals of controlling Medicare spending and of providing richer benefits for beneficiaries. If Medicare spending is controlled by bringing payments to M+C plans closer to the cost of providing the basic benefit, it becomes difficult to maintain generous benefit packages and zero premiums for the fortunate beneficiaries who have them, much less to extend those benefits to others. Without generous benefits, encouraging enrollment in M+C plans is more difficult; many people do not want to give up their choice of providers without a financial reward. The Congress wants to take advantage of the efficiencies to be gained from managed care, but it is

**FIGURE 5-1**

## Medicare+Choice (risk) plan enrollment



Source: HCFA monthly managed care summary report.

still wrestling with how to share the savings from those efficiencies in a way that both attracts beneficiaries to the program and limits government spending.

As discussed later, even with additional spending, it is difficult to overcome the market-based obstacles to M+C program extensions to rural areas. Finally, the evolution of plan options may also be in conflict with the introduction of risk adjustment and other actions that make future revenue streams less certain for plans, even while they tend to control Medicare spending.

### Controlling Medicare spending

How would we know if the Medicare+Choice program is helping to control spending in the Medicare program? By one definition, M+C controls spending if Medicare payments for beneficiaries enrolled in M+C plans are less than or equal to what payments would have been for those same beneficiaries under traditional FFS coverage.

Under this definition, before the BBA, the predecessor to the M+C program (the risk-HMO program) was not controlling spending. Plans enjoyed favorable selection—they enrolled beneficiaries with lower-than-average health care costs—and the program lost from 5 to 7 percent for each beneficiary enrolled in a risk-HMO (ProPAC 1997, PPRC 1996, Riley et al. 1996, Brown et al. 1993). The plans may have been delivering health care more efficiently than the traditional program (by negotiating lower rates, avoiding fraudulent or high-cost providers, and curtailing use), but administrative and marketing costs and plan profits offset some of the efficiency savings. Any remaining efficiency savings either were retained by the plan or passed on to beneficiaries in the form of more benefits, due to competition for enrollees in local markets. The plans almost never chose to return money to the Medicare program.

These findings prompted Congress to (1) include risk adjustment in the BBA to counteract favorable selection, so payments for plans would approximate

more closely the cost of care, and (2) try to decrease what was deemed to be excessive variability in county payments, by limiting payment increases in higher-payment counties and increasing payments in lower-payment counties. However, the Congress also mandated a 2 percent minimum increase in county rates. As a result, annual growth in counties in which more than 90 percent of M+C plan members lived was 2 percent in 1998 and 1999.

Did the Congress's actions control Medicare spending? Not relative to growth in Medicare program payments per beneficiary in the traditional program. Average Medicare spending per beneficiary in the FFS program increased by 0.2 percent in 1998 and actually fell by 2.5 percent in 1999. At the same time, average Medicare spending per M+C enrollee increased 2.5 percent in 1998 and 2.7 percent in 1999.<sup>2</sup> In addition, these larger increases were applied to 1997 base payment rates that themselves were too high, due to favorable selection and because they incorporated an overestimate of future spending. (The regulations in effect before BBA would have corrected for the overestimate, which was about 3 percent.)

Achieving other goals, such as expanding the population in M+C plans or expanding benefits, will not help control spending unless payments to plans reflect the health status of the beneficiaries and base payment rates are appropriate. Expanding the Medicare+Choice program to rural or formerly lower-payment counties by paying rates higher than FFS costs for the beneficiaries also will not control spending.

### Providing more plan options for beneficiaries

The BBA permitted new kinds of plans to participate in the Medicare+Choice program. To date, few have joined the program. Why hasn't there been more participation?

<sup>2</sup> MedPAC calculations based on monthly Treasury statements and HCFA enrollee reports.

## Obstacles to participation

Provider sponsored organizations were encouraged to enter the program by receiving waivers to certain technical HMO requirements. However, only one PSO joined the M+C program with a waiver, and several that had been participating in the Medicare Choices demonstration program dropped out. This suggests that the requirements waived by the BBA are not the primary obstacles to PSO participation. Two other reasons make it difficult to attract PSOs into Medicare+Choice. First, PSOs must be large enough to achieve economies of scale, make an up-front investment to establish and market themselves, and meet solvency requirements. Second, there is a basic contradiction between the way managed care plans achieve savings and the interests of providers. For example, a key technique used by managed care plans is the substitution of outpatient services for hospital inpatient admissions and longer lengths of stay. For a hospital-based PSO, the substitution of outpatient services for hospital admissions and longer lengths of stay decreases its hospital revenues. Similarly, limiting provider payments to achieve savings decreases provider revenues. This basic contradiction forced several of the PSOs in the demonstration program to leave it, and may be limiting the success of such ventures in the commercial arena as well.

Other types of managed care plans provided for in the BBA faced obstacles to participating in the M+C program. Preferred provider organizations, one of the more popular options for people with employer-sponsored insurance, have larger and looser networks than do other forms of managed care. Collecting the data and implementing the quality improvement programs required by HCFA, while limiting administrative costs, may have been significant obstacles to PPO participation. For these or other reasons, no PPOs have joined the program.

Medicare+Choice plans attached to medical savings accounts also have not entered the market, perhaps because of perceived risk aversion in the beneficiary population or unfamiliarity with the concept. Finally, one private fee-for-service plan has applied to be an M+C plan in 30 states. Because this application is the first of its kind, HCFA must work through all of the implementation and management issues that arise when setting up a private fee-for-service plan, and therefore has not yet approved the plan.

## Uncertainty

One concern that may contribute to the lack of new plans and plan types (and which may be discouraging current participants) is uncertain future revenue streams for plans. This uncertainty makes it difficult to justify business plans for entering the program and tends to rule out an entry that might be profitable but also carries some risk of significant loss. One contributor to uncertainty is the advent of risk adjustment.

**Risk adjustment** Effective January 2000, payments to plans are adjusted based on each enrollee's inpatient hospital diagnoses in the preceding year, if any, as well as on traditional demographic factors. The Congress legislated risk adjustment to ameliorate the effect of favorable selection into Medicare+Choice plans and to move plan payments closer to costs. Because payments vary by enrollee over time, plans perceive that risk adjustment makes it more difficult to project future revenues than when payments varied only by enrollees' demographic characteristics. Forecast uncertainty discourages participation, particularly in counties where revenues and costs are projected to be close and the magnitude of a loss may be significant.

**Other uncertainties** Ironically, the very act of trying to encourage participation by changing payment rules increases the uncertainty of future revenue streams. It is difficult for managed care organizations (MCOs) to construct

business plans if each year the rules for phasing in risk adjustment change, the amount of GME carveouts differs, or the administrative requirements change. For a plan, it is difficult not only to predict its own performance, but also to understand its competitors. There may be an argument for allowing the marketplace to recalibrate to a known set of rules before making further innovations to payment policy.

## Bringing alternatives to the traditional program to rural and other new markets

The goal of bringing more choices for Medicare beneficiaries to rural and lower-payment counties remains elusive. Although payment rates have increased, participation is still spotty and has decreased overall. This section examines why bringing more choice to underserved areas remains an intractable problem.

## Rural areas

Rural areas remain unlikely to attract HMOs, even if the payments in those areas rise above fee-for-service costs. An expert panel convened by MedPAC staff suggested two reasons it is difficult to expand the Medicare+Choice program to rural areas.<sup>3</sup>

First, the structure of the marketplace in rural areas is not conducive to forming managed care networks. The rural marketplace is characterized by low population density and often by few or monopoly providers. To operate in a rural area, an MCO must form a network of providers accessible to all residents. If the population is dispersed, it may be difficult to have a network of providers that meets regulations on accessibility. In addition, marketing and overhead costs may be prohibitive, particularly when no commercial product exists to share overhead costs. At the same time, MCOs usually negotiate with providers to lower their rates or alter their practice patterns so that care can be purchased less expensively. Where there is a monopoly provider, the MCOs are in a weak

3 MedPAC expert panel on Medicare+Choice plan participation and withdrawals. September 16, 1999.

bargaining position to get lower rates, and may not convince providers to sign up with the network. Monopoly providers may reason that they will see the patients at Medicare rates in any case, so there is no need to enter into an agreement with an MCO at a discounted rate.

Second, M+C payment rates may be too low to encourage plan entry. Unless payments in rural counties are at the floor level, they are still tied to some extent to historical FFS costs. If so, the payment may be insufficient if FFS costs were depressed because of less use of medical services. The panel suggested that a decrease in use occurs when beneficiaries cannot afford medical care because Medicare coinsurance and deductibles are too expensive and they cannot afford Medigap premiums. When plans enter such areas and have no deductibles and low copayments, they sometimes experience a sudden spike in demand for medical services, and face payments insufficient to cover the medical costs of the population. Compared with urban areas—in which HMOs can often reduce use—rural areas appear particularly unattractive.

Plans at full risk may simply not make sense in some rural areas, said panelists who testified before the Commission.<sup>4</sup> They discussed alternative models, including primary case management and sole source risk contracting, although they considered neither particularly promising. If the objective were to preserve access in rural areas by providing a predictable revenue stream to small medical groups, then some form of split capitation, with the local groups not being at risk for costs they could not control, might be preferable. Insisting on full-risk assumption by small groups or networks in rural areas will continue to discourage participation.

### **Lower-payment areas**

Some counties have relatively low payment rates, compared with adjacent

areas, and have not been attractive to plans in the past. Plan participation in lower-payment areas may decrease as the uncertainties involved with the program grow and the cost of care rises. Although payments were historically tied to FFS spending, we analyzed the plans' Adjusted Community Rate Proposals for 2000 and found that the variation in payment rates to counties exceeds the variation in the underlying cost of providing basic benefits. This finding is corroborated by looking at average premium amounts in commercial HMOs, which show little correlation with Medicare payment rates. Both findings suggest that in lower payment areas, plans may have trouble providing even the basic benefit and making a profit. In some cases, plans may be active in lower- and higher-payment counties adjacent to one other. In the past, plans may have been willing to serve those lower-payment counties, even at a loss, because they made the plans' market areas more coherent. However, as losses have mounted, plans have become less willing to extend coverage to lower-payment counties.

### **Encouraging enrollment and richer benefit packages in Medicare+Choice plans**

Although some beneficiaries are attracted to M+C plans because of the simpler coordination of benefits and cost-sharing structure, many beneficiaries want to enroll in M+C plans because they get more benefits at a lower cost than they would under traditional FFS Medicare coverage. Therefore, to encourage enrollment, plans must be able to offer benefits that are more generous than those in the traditional program, or the sum of premiums and expected cost sharing must be less than expected costs under the traditional program, or both.

Payment growth per capita in the traditional program was low or negative in 1998 and 1999. This resulted in the BBA minimum increase in county payment rates of 2 percent a year in the home

counties of more than 90 percent M+C plan members. At the same time, medical costs, commercial premiums, and other measures of cost growth in those counties increased at a higher rate. For example, average commercial HMO premiums increased more than 5 percent from 1997 to 1998 (Lauer et al. 1999).<sup>5</sup> If costs are increasing faster than revenues, then plans must become more efficient, profits must fall, or benefits must be reduced. In some markets, the largest gains from productivity or efficiency from managed care have already been achieved, and remaining gains will be incremental. There are also limits to how low profits can fall. Theoretically, in competitive markets, profit margins should already be limited by competition. Also, some would argue that at this stage of the underwriting cycle, there is evidence that profits have already been limited by the drive to increase market share. Given that profit levels have already been limited and efficiencies achieved, it would be surprising if benefit levels could be maintained, much less increased.

### **Prescription drug cost growth**

A key draw for many beneficiaries is coverage for outpatient prescription drugs. Although some successful M+C plans lack drug coverage, many beneficiaries cite drug coverage as a reason for joining an M+C plan.

The outpatient prescription drug benefit has been under considerable cost pressure. The well-publicized increases in outpatient prescription drug costs are not reflected in Medicare spending, because they are not part of the basic benefit package. Medicare+Choice plans that include outpatient prescription drug benefits must fund them from the difference between payment from Medicare and the cost of the basic benefit, or by a supplementary premium. Even if payments were to increase as fast as plans' costs of offering the basic benefit, prescription drug costs are increasing at a much faster rate. If plans continued

4 Panel on rural Medicare policy issues. November 18, 1999.

5 An exception to the pattern of increasing costs is expenditures per Medicare beneficiary, which decreased in 1999. However, the plans may not have shared in some of the savings that caused this decrease, such as less aggressive coding of hospital stays and less use of home health.

offering the same package, the money to fund drug coverage would not be sufficient unless plans reduced the cost of providing the basic benefit package. As long as prescription drug costs continue to increase faster than payments, prescription drug benefits will become more limited or beneficiaries will be charged a higher premium.

The pressure to reduce benefits and increase premiums is bound to continue. Evidence to date shows that enrollment has continued to grow, although at a lower rate than in past years. Whether that trend will continue if benefits are reduced and premiums increased is not known, and is something that MedPAC will monitor closely.

---

## Addressing barriers to program goals through the Balanced Budget Refinement Act

---

In the Balanced Budget Refinement Act (BBRA), Congress attempted to help the M+C program make progress toward its goals. Many BBRA modifications attempt to help expand choice, and the Commission believes these changes have some potential to achieve this goal.

## Controlling Medicare spending

The Congressional Budget Office estimates that over the next five years, the BBRA will lead to \$4.9 billion in increased spending in the M+C program. About 60 percent will result from increased spending in the traditional Medicare FFS program. Because M+C updates are tied to national FFS spending, the increases that Medicare's FFS providers received in the BBRA will translate into a larger national update factor. Several provisions, however, provide specifically for increased spending for the M+C program.

## Slower phase in of risk adjustment

HCFA estimates that if plans maintained the same enrollee risk profile, payments to plans would decrease by about 5.8 percent if the principal inpatient diagnosis-diagnosis cost group (PIP-DCG) risk adjusters were fully implemented. HCFA scheduled a transition in which 10 percent of plan payments would be based on the risk adjusters in 2000, with the portion of payments determined by the risk adjusters gradually increasing until all payments will be risk adjusted in 2004 (at which point the PIP-DCG risk adjuster is expected to be replaced by a more comprehensive risk adjuster). The BBRA further backloaded the transition; the percentage of payments based on risk adjusters in 2001 and 2002 will be reduced, relative to HCFA's original schedule. As a result, average payments to M+C plans will be slightly higher during 2001 and 2002.

## Other increases

M+C plans also are expected to receive higher payments due to two other provisions in the BBRA. First, the beneficiary education assessment—about \$1.50 per member per month—will be reduced by more than 80 percent. Second, the average plan payment will increase by 0.2 percent in 2002 and in all subsequent years, by virtue of an increase in the annual update in 2002.

## Providing more plan options for beneficiaries

The Congress has expressed concern over the high rate of plan withdrawals over the past two years. The health plan industry has argued that these withdrawals have occurred primarily because of low payment rates and an unfavorable regulatory climate. In addition to raising payments as detailed above, the Congress heeded some of the regulatory concerns. Several BBRA provisions aim specifically at improving the regulatory climate for

plans in an effort to improve plan participation.

The Congress included two important provisions—recommended by MedPAC in June 1999—which HCFA was following but which were not in law. The first moves the deadline for plan applications for inclusion in the M+C program to July 1, rather than May 1, as stipulated in the BBA. Through this action, plans will be better able to forecast their program costs for the following year, and thus will have more confidence in the cost and benefit applications they submit. The second provision allows plans to “segment” service areas along county lines. Plans may thus charge higher premiums to beneficiaries that live in lower-payment areas, allowing the plans to better match revenues to costs and continue to service those counties, rather than withdrawing.

## Preferred provider organizations exempt from quality assurance requirements

The BBRA reduced requirements of the M+C quality assurance program for preferred provider organizations.<sup>6</sup> The Congress took this action in response to the lack of PPO participation in the M+C program. Because PPOs are believed to be more feasible than HMOs for rural areas, the Congress sought to encourage PPO participation in the program to promote health plan availability for beneficiaries in rural areas.

## Continuous open enrollment for institutionalized individuals

Beginning in 2002, most beneficiaries enrolling in M+C plans will enroll at the beginning of each year. Except for beneficiaries new to Medicare or those with special circumstances, plans cannot accept new enrollees after June in 2002, or after March in later years. As a result, plans that specialize in treating the institutionalized might have a problem maintaining a stable population; many of

---

<sup>6</sup> The BBA established certain minimal quality program requirements for all plans participating in the Medicare+Choice program, and a more extensive set of requirements for so-called coordinated-care plans (including health maintenance organizations, preferred provider organizations, and plans offered by provider-sponsored organizations) and network medical savings account plans. (MedPAC's March 1999 report to the Congress provides a description of the requirements and their application). In the BBRA, the Congress exempted PPOs from the more stringent requirements, categorizing them with private fee-for-service plans and non-network MSA plans for quality requirement purposes.

---

their enrollees die within a year. To avoid this problem, the BBRA provides that institutionalized beneficiaries may sign up or switch M+C plans at any time.

### **Bringing alternatives to the traditional program to rural and other markets**

Congressional concern for the lack of progress in increasing the number of beneficiaries with alternatives to traditional Medicare prompted several provisions in the BBRA affecting both payments and participation requirements.

#### **New area bonuses**

The BBRA creates bonus payments for plans that enter areas where no other M+C plan is operating. Plans will receive a 5 percent bonus for one year and a 3 percent bonus during the second year. This provision is targeted to increase the number of beneficiaries with a plan available.

#### **Shortening exclusion period**

Under the BBA, most M+C plans that left the program were excluded from the M+C program for five years. The BBRA shortened the exclusion period to two years and provided an exception; plans may reenter the program immediately if new legislation raises payment rates and no more than one other plan is operating in a proposed county at that time.

#### **Extension of Medicare cost contracts**

At the end of 1999, HCFA had 46 cost-based contracts with managed care organizations. More than 300,000 beneficiaries were enrolled in plans under these contracts, some in areas without M+C plans. The BBA directed that these cost contracts could not be renewed after 2002; the BBRA extended the cost contract program through 2004.

### **Encouraging enrollment and richer benefit packages in Medicare+Choice plans**

The higher payments resulting from BBRA provisions may increase plan

availability and the ability of plans to offer richer benefit packages. In addition, a number of provisions intended to make enrollment easier for beneficiaries. For example, the provision allowing continuous open enrollment for institutionalized beneficiaries may encourage those beneficiaries to enroll. Other provisions make it easier for enrollees in M+C and Program of All-inclusive Care for the Elderly plans to obtain Medigap coverage after they leave plans or when plans are terminated. The Medigap guarantee provisions, which are discussed more fully in Chapter 2, encourage beneficiaries to enroll in M+C plans by assuring that if they do not like the M+C plans, they can return to traditional Medicare within a year without forfeiting the ability to buy a Medigap supplement.

---

### **Will the Balanced Budget Refinement Act changes help achieve the Congress's goals for the Medicare+Choice program?**

---

Because of the BBRA, payment rates for M+C plans should rise. Some provisions—including lowering the consumer education assessment fees and slowing the transition to the new risk-adjustment system—will have immediate impacts. Others, such as increasing the 2002 update and increasing payments to Medicare FFS providers, will have no effect until 2002. (Although the FFS provisions were not targeted to help M+C plans, plans will see increased payments nonetheless.)

Payment increases resulting from a higher update will also change the distribution of M+C payments. During 1998 and 1999, updates resulting from the BBA were so low that there was no money to fund blended payment rates above the minimum 2 percent update. The update for 2000 will allow blended rates for the

first time. Although HCFA does not formally announce the 2001 rates until March 1, 2000, the preliminary announcement on January 14 strongly suggested that all non-floor rates would increase by the minimum 2 percent, due to corrections to overestimates of growth in Medicare spending in 1998 and 1999. Therefore, it is unlikely there will be any further rate blending during 2001, but the higher spending in BBRA should allow for more blending in the future. Lower-rate counties should then continue to get larger updates than the 2 percent that will go to some of the higher-rate counties.

These payment changes may mean that more lower-rate counties without M+C plans may be able to attract them, and that plans in higher-rate counties may find it difficult to maintain their benefit packages and could lose enrollment to Medicare FFS.

Although the floor payment rates were designed to help attract plans to areas with low payment rates, few beneficiaries living in floor payment areas currently have access to M+C plans. Although bonus payments may entice plans into some areas, the gap between HMO costs and current payment rates is probably more than 5 percent in most floor counties. If temporarily raising payment rates does not attract HMOs to the lower-payment areas, the BBRA provision that makes it easier for PPOs to become M+C plans may help.

In summary, MedPAC believes that the Congress's attempt to increase plan participation and availability through several BBRA provisions has the potential to succeed in providing Medicare beneficiaries with more coverage choices. MedPAC supports the general thrust of the M+C provisions in the BBRA, will continue to monitor the program's progress towards its goals, and makes no further recommendations at this time. ■

## References

---

Brown RS, Bergeron JW, Clement DG, et al. The Medicare risk program for HMOs—final summary report on findings from the evaluation. Princeton (NJ), Mathematica Policy Research, Inc. February 1993.

Lauer TM, Boese AE, Barua S, Lauer EL. The InterStudy competitive edge part III: Regional market analysis. St. Paul (MN), Decision Resources Inc. November 1999.

Medicare Payment Advisory Commission. Report to the Congress: Medicare payment policy. Washington (DC), MedPAC. March 1999.

Physician Payment Review Commission. Annual report to Congress, Washington (DC), PPRC. 1996.

Prospective Payment Assessment Commission. Report to the Congress: Medicare and the American health care system. Washington (DC), ProPAC. June 1997.

Riley G, Tudor C, Chiang YP, et al. Health status of Medicare enrollees in HMOs and fee-for-service in 1994, Health Care Financing Review. Summer 1996, Vol. 17, No. 4, p 65–76.

U.S. Congress. Conference report to accompany H.R. 2015, Balanced Budget Act of 1997. July 1997.

CHAPTER 6

---

**Improving payment for end-stage  
renal disease services**

---

# R E C O M M E N D A T I O N S

**6A** As soon as possible, the Secretary should risk-adjust payments for patients with end-stage renal disease (ESRD) enrolled in Medicare+Choice.  
.....

**6B** The Congress should require HCFA to annually review the composite rate payment.  
.....

**6C** For fiscal year 2001, the composite rate for outpatient dialysis services should be increased by 2.4 percent.  
.....

**6D** HCFA should collect information on ESRD patients' satisfaction with the quality of and access to care.  
.....

**6E** Once HCFA has implemented a risk-adjusted payment system and a system to monitor and report on the quality of care, the Congress should lift the bar prohibiting patients with ESRD from enrolling in Medicare+Choice.  
.....

**6F** ESRD patients who lose Medicare+Choice coverage because their plan leaves the area should be permitted to enroll in another Medicare+Choice plan.

## Improving payment for end-stage renal disease services

**B**ecause of the increasing number and acuity of patients, the rapid growth in payments since program inception, and continuing concerns about the quality of dialysis care, the Medicare Payment Advisory Commission has assessed the current system for paying for the care of patients with end-stage renal disease (ESRD). The Commission's evaluation found deficiencies in the design and update of the prospective payment system for outpatient dialysis services in the traditional Medicare program and in the payment and enrollment policies of Medicare+Choice. In the traditional Medicare program, the composite rate does not appropriately pay for outpatient dialysis services because the unit of payment does not fully reflect the nature and duration of ESRD care, the adjustment factors are inadequate, and there is no update factor. Furthermore, the payments to Medicare+Choice plans are inadequate because they are not risk adjusted. ESRD patients do not have the same freedom of choice to enroll in Medicare+Choice as do all other Medicare beneficiaries, a restriction that should be lifted as soon as possible. It is necessary to monitor patient satisfaction with care to determine whether ESRD patients face obstacles in obtaining needed care in both traditional Medicare and Medicare+Choice.

### In this chapter

---

- Paying for ESRD care in the traditional Medicare program and in Medicare+Choice
  - Payment update
  - Access to and quality of dialysis care
-

End-stage renal disease (ESRD) is a chronic illness characterized by permanent kidney failure. ESRD occurs at the last stage of progressive impairment of kidney function and is caused by a number of conditions including diabetes, hypertension, glomerulonephritis, and cystic kidney disease. The 1972 amendments to the Social Security Act extended Medicare benefits to people with ESRD, and about 300,000 patients were enrolled in the program in 1998.<sup>1</sup>

In previous years, the Commission has evaluated the adequacy of the payment rate for outpatient dialysis services (the composite rate) and recommended updates to this payment. Given the increasing number and acuity of patients, the rapid growth in payments since program inception, and continuing concerns about the quality of care for ESRD patients, the Medicare Payment Advisory Commission (MedPAC) has expanded upon its previous analyses to address whether current ESRD payment incentives are aligned to ensure that appropriate, high-quality medical services are efficiently provided. In particular, the Commission has considered whether the current system for paying for the care of ESRD patients undergoing dialysis meets Medicare's payment policy objectives. These objectives include providing incentives for controlling costs and total payments; providing cost-effective, quality care to patients using the most suitable modality in the most suitable setting; and promoting access to services.

This chapter explores these issues in three sections. The first reviews the main design features of the traditional Medicare payment system, finding that components currently included in the ESRD unit of payment may not fully reflect the nature and duration of ESRD care. It also finds that the current composite rate pays different prices for the same service provided in different settings, does not adjust for patient characteristics and dialysis practices, and uses a wage index not specific to the labor mix employed by dialysis facilities and based upon urban-

rural definitions from 1980. Consequently, MedPAC believes that the composite rate may not be appropriately paying for outpatient dialysis services, and we outline key issues to consider in refining the payment system for outpatient dialysis in traditional Medicare. This section also reviews the main design features of the Medicare+Choice (M+C) payment system for ESRD patients—which does not currently risk-adjust payments to plans—and recommends that HCFA move to risk-adjust payments to M+C plans.

The second section examines updating payments for outpatient dialysis services in the traditional Medicare program and paying for ESRD patients enrolled in M+C plans. We recommend that HCFA consider an annual update of the composite rate payment. We evaluate the need to update the composite rate for fiscal year 2001 by examining providers' willingness to serve, changes in input prices, improvements in productivity and dialysis technologies, and differences between Medicare payments for outpatient dialysis services and providers' costs. Lastly, we discuss updating M+C payments for patients with ESRD.

The third section addresses access to quality care in the traditional Medicare program and in M+C. We review what is known about access to and quality of dialysis care. Then, we discuss the federal statute prohibiting patients with ESRD from enrolling in M+C, the statute's affect on access to care, and conditions that must be met before the prohibition is removed.

---

## **Paying for ESRD care in the traditional Medicare program and in Medicare+Choice**

---

The features of the ESRD payment system, both in traditional Medicare and Medicare+Choice, differ from those of

other payment systems. This raises several questions about whether the design of this payment system promotes the efficient use of appropriate, high-quality, cost-effective care. To answer these questions, the Commission evaluated various components of the payment system, using the framework outlined in our March 1999 report (MedPAC 1999b).

## **Traditional Medicare program**

Since 1983, when HCFA implemented the current payment system for dialysis and related services for patients with ESRD, dialysis facilities have been paid a fixed, prospective amount for each outpatient dialysis treatment, regardless of how it is provided. This prospective payment, called the composite rate, covers a bundle of services, laboratory tests, drugs, and supplies routinely required for dialysis treatment. HCFA derived the base composite rate using data from a 1977–1979 sample of facility cost reports and published a final rule implementing the new payment in May 1983. The composite rate has not been re-based since then.

In general, providers may bill Medicare for no more than three dialysis sessions per week. Facilities are also paid a fixed, prospective amount for providing dialysis training, which teaches ESRD patients to perform self-dialysis in the facility or at home with little or no professional assistance. Physicians receive a monthly capitation payment, separate from the composite rate, for the outpatient dialysis services they provide; HCFA recently included this payment in the Medicare resource-based relative value scale system. All other services are paid according to the payment methods specified by Medicare for inpatient and outpatient services.

## **Bundle of services included in the composite rate**

HCFA specifies the services (and their associated frequencies of use) included in

---

<sup>1</sup> To qualify for the ESRD program, individuals must be fully or currently insured under Social Security or Railroad Retirement programs, entitled to monthly benefits under one of these programs, or the spouse or dependent child of an eligible beneficiary.

**TABLE  
6-1**

**Examples of separately billable laboratory tests and drugs**

Separately billable laboratory tests

Patients receiving hemodialysis, intermittent peritoneal dialysis, or continuous cycling peritoneal dialysis

- every three months: serum aluminum
- every three months: serum ferritin

Patients receiving continuous ambulatory peritoneal dialysis

- every three months: white blood count, red blood count, platelet count
- every six months: residual renal function, 24-hour urine volume

Separately billable drugs

- anabolics
- analgesics
- antibiotics
- erythropoietin
- hematinics
- muscle relaxants
- sedatives
- tranquilizers
- thrombolytics (when used to de clot central venous catheters)

Source: MedPAC analysis of information published in HCFA's fiscal intermediary manual.

- Hospitals and independent laboratories were receiving separate payments for laboratory tests included in the composite rate. The OIG concluded that nearly half of all payments for separately billable laboratory services during 1994 were erroneous (OIG 1996).
- There were large differences in the numbers of tests ordered for patients with ESRD undergoing dialysis. The GAO concluded that certain tests may be overused, and others under-used (GAO 1997).

Based in part on these findings, HCFA and its fiscal intermediaries have undertaken a significant effort to monitor and contain payments for services outside the composite rate. The Commission urges HCFA to evaluate further the services associated with providing outpatient dialysis, and begin to consider whether the bundle of services included in the prospective payment should be modified.

**Adjustments to the composite rate**

The composite rate is adjusted for facility ownership, dialysis modality, and area wage differences. Currently, hospital-based facilities are paid an average of \$4 more per dialysis session than are freestanding facilities. This difference originated in the Omnibus Budget Reconciliation Act (OBRA) of 1981, which initially directed the Secretary to establish a prospective reimbursement system for outpatient dialysis. Eight years later, in OBRA-89, the Congress further adjusted the composite rate by permitting additional payment for one type of peritoneal dialysis for patients dealing directly with one dialysis supplier. This type of dialysis, continuous cycling peritoneal dialysis (CCPD), is paid at up to 130 percent of the composite rate.

The labor portion of the composite rate is adjusted for differences in local area wages. Since October 1, 1987, the wage index has consisted of a blend of 60 percent of the 1980 Bureau of Labor Statistics hospital wage index and 40

the composite rate in its reimbursement manuals. This prospective payment bundle for a single dialysis episode does not include all drugs and laboratory tests associated with a dialysis episode. In comparison, under the inpatient hospital prospective payment system (PPS), hospitals receive a prospectively determined payment for furnishing all acute services for each Medicare discharge.

Medicare explicitly stipulates that certain drugs and laboratory services provided during an outpatient dialysis session are not included in the composite rate and may be billed separately. HCFA modifies this list of excluded services over time, based on factors including clinical knowledge and practice change and empirical analyses of the use of particular items or services. Table 6-1 provides examples of parenteral drugs and laboratory tests that may be billed separately by facilities when administered at prescribed frequencies by facility staff. To receive payment for separately billable tests or drugs, or for services included in

the composite rate that are conducted more frequently than specified, a facility must document medical necessity to allow its fiscal intermediary to determine the reasonableness of the request. Overall, payments for separately billable services account for about 35 percent of payments made to dialysis facilities.

Excluding a service from the composite rate does not solely depend on the frequency of its use, the number of dialysis patients who require it, or the magnitude of its payments. For example, although nearly all in-center hemodialysis patients regularly receive erythropoietin, it remains a separately billable drug (Greer et al. 1999). In 1997, approved Medicare charges for erythropoietin totaled \$901 million and represented approximately one-fifth of all payments to dialysis facilities. The staff time used to administer separately billable drugs and tests is included in the composite rate.

Reports from the Office of Inspector General (OIG) and the General Accounting Office (GAO) found that:

percent of the fiscal year (FY) 1986 HCFA gross PPS hospital wage index for each Metropolitan Statistical Area, subject to a floor and a ceiling. Payments to facilities in areas where labor costs fall below 90 percent of the national average are not adjusted below the 90 percent level. Payments are capped at \$139 per dialysis treatment. Urban and rural areas are defined using 1980 definitions.

A facility may apply for an exception to its composite rate when dialysis costs exceed this rate. The four circumstances that may justify a payment exception are: 1) atypical case mix (furnishing dialysis to patients who, because of their complex medical needs, require more intense care); 2) frequency of dialysis (furnishing dialysis to patients at a frequency less often than three times per week); 3) isolated essential facility (furnishing dialysis in isolated areas essential for access to care for patients with ESRD); or 4) extraordinary circumstances (for example, furnishing dialysis in areas of natural disasters). Additionally, a facility may apply for an exception to its self-dialysis training payment rate, but only within 180 days of: 1) the effective date of its new composite payment rate; 2) the effective date that HCFA opens the exception process; or 3) the date on which an extraordinary cost-increasing event occurs. The last payment exception window in the 1990s spanned the 180-day period beginning November 1, 1993. A new exception window recently opened because the Balanced Budget Refinement Act of 1999 (BBRA) increased the composite rate on January 1, 2000.

### **Issues in refining a prospective payment system for outpatient dialysis in traditional Medicare**

After reviewing the bundle of services included in the prospective payment for outpatient dialysis and the way in which the payment is adjusted, the Commission believes that the composite rate may not be paying appropriately for outpatient dialysis services, and that changes may be required in the future. As a first step, the Commission has identified key issues to

consider in refining this PPS. These include the unit of payment, the payment's relative value, local input price adjustments to the payment, other rate adjustments to the payment, and the level of the payment.

The first step is to consider the unit of payment. Currently, the composite rate's unit of payment is based on a single dialysis episode. The critical question to address is whether this unit of payment is too small. Ideally, the unit of payment should reflect the way providers think about the product and promote the efficient provision of high-quality care. All patients with ESRD, other than those who undergo kidney transplantation, require a life-long, regular course of dialysis. If providers view patients' care in terms of a continuous stream of care, rather than a single dialysis session, then a unit of payment longer than a single session should be considered.

Given a defined unit of payment, the services to be included in, or excluded from, the prospective payment bundle need to be considered. Currently, HCFA specifies the frequency with which certain services inside and outside the composite rate bundle can be performed. In contrast, HCFA does not generally define the bundle of services included in other prospective payment bundles. No attempt is made, for example, to develop or to enforce a definition of the services required for patients undergoing a coronary artery bypass procedure. An explicit bundle of services may stifle clinical innovations that may provide less costly ways to deliver services.

The GAO considered expanding the bundle included in the composite rate by examining the frequency with which individual patients receive specific services. It concluded that no separately billable service or supply was provided frequently enough to be considered part of the composite rate bundle (GAO 1995). However, a bundle in which certain services are explicitly excluded would maintain the current dual payment

system—a PPS for certain services associated with the dialysis episode, and a fee-for-service system for specific services excluded from the prospective payment. Excluding certain services from a prospective payment bundle provides an incentive for providers to overuse these services and to unbundle the prospective payment bundle to the extent possible. In a 1992 analysis, the OIG examined the use of separately billable drugs during outpatient dialysis, and found that the frequency and kinds of drugs varied from facility to facility (OIG 1992). Because of this variation, the OIG recommended that HCFA consider a methodology for folding the costs of all separately billable drugs into the composite rate.

Should the bundle include related care by providers other than dialysis facilities? To what extent do dialysis patients with ESRD receive outside services related to the dialysis session? The answers are not currently evident, but could be determined by analyzing administrative claims data. Outpatient care provided by medical providers other than dialysis facilities should be evaluated to determine the extent to which it is related to dialysis care and whether it should be included in the prospective payment.

Once the bundle of service is defined, three important issues need to be addressed in establishing prospective payment amounts. The first is whether there should be any difference between outpatient dialysis payments to hospital-based and those to freestanding facilities. Other factors being equal, Medicare should pay the same price for the same service, regardless of the setting in which it is furnished. There is no apparent reason why an efficient level of costs for hospital-based facilities should be greater than that for freestanding facilities. The availability and analysis of audited facility cost report data in the upcoming year should shed some light on whether hospital-based facilities still have greater costs than do freestanding facilities.<sup>2</sup> If

<sup>2</sup> The BBA required HCFA to audit facilities' cost reports. To comply, HCFA is currently auditing FY 1996 cost report data for freestanding and hospital-based facilities. These audits will be completed in three stages: one-third of facilities in FY 1999, one-third in FY 2000, and one-third in FY 2001.

they do, the reasons for this difference need to be addressed. Are higher costs the result of treating a more severely ill patient population? If hospital-based facilities treat a greater proportion of ESRD patients who are unstable or acutely ill, then case-mix adjustment should be considered, rather than a unilateral difference in payment rates based on facility ownership. Alternatively, higher costs may be due to greater investment in new, costly technologies. Are there differences in the adoption of new technologies among freestanding and hospital-based facilities? Does the use of new technologies promote higher-quality care? Finally, do hospital-based facilities' higher costs reflect the difficulties these institutions have in separating the costs of outpatient and inpatient dialysis services?

The second issue is whether payments should be adjusted for patient case-mix or dialysis practices. Currently, the composite rate has no patient classification system and assumes that patients with ESRD undergoing dialysis are homogeneous, or at least that the mix of patients across facilities is similar. The composite rate is similar to a single diagnosis related group (DRG) that pays at a fixed, per treatment rate for one service. Patient case mix has not been shown to affect the costs incurred by dialysis facilities, but this lack of association may reflect inadequate dialysis dosing for patients who are unstable or acutely ill (Hirth et al. 1999). More research is needed to determine the extent to which severely ill patients are not getting adequate dialysis.

Additionally, the composite rate makes no adjustment for dialysis practices, other than the additional payment for CCPD for home patients who deal directly with a dialysis supplier. The composite rate and Medicare's coverage regulations make no additional payment for patients who might require longer dialysis or more frequent weekly sessions,<sup>3</sup> although several studies have concluded that higher payments may

be needed to increase the length of dialysis sessions (Held et al. 1990, Hirth et al. 1999). Despite the CCPD payment incentive, use of this modality by dialysis patients has increased only slightly, from 3 percent of all dialysis patients in 1993 to 5 percent in 1997. Finally, the costs of dialysis facilities to provide home-based peritoneal dialysis are lower than the costs to provide in-facility hemodialysis. Using 1998 cost report data, MedPAC estimates that the costs of providing continuous ambulatory peritoneal dialysis (CAPD) and CCPD were about 10 percent lower than the costs of providing in-facility hemodialysis. An earlier study found a similar cost differential between in-facility hemodialysis and peritoneal dialysis (Dor et al. 1992). Two key questions to be addressed by MedPAC in an upcoming study mandated by the BBRA are whether a single payment level is justified, given these differences in costs by modality, and whether the payment system should pay for longer or more frequent dialysis. MedPAC's work plan for this study is outlined below.

The third issue in establishing prospective payment amounts is how the payment should be adjusted for differences in local wages. Currently, an adjustment is made to reflect differences in input prices, but the wage index is based on urban-rural definitions from 1980 and assumes that dialysis facilities' labor mix is similar to that of PPS hospitals. A current wage index, representing the mix of labor specifically required to provide outpatient dialysis, would be more useful. HCFA has yet to develop a wage index specific to outpatient dialysis, despite having a PPS since 1983. Another issue to consider is the need for a wage-index floor and ceiling. Hirth et al. (1999) modeled the relationship between facility costs and the wage-index floor and ceiling and concluded that facilities receiving the floor payment did not pass windfalls on to patients in the form of higher spending on treatment. Facilities with payments constrained by the ceiling incurred

substantially higher costs than would be expected, given their actual payments.

Another issue to ensure fair payment for outpatient dialysis is determining the need to adjust rates when facilities face unpredictable higher costs, such as treating a severely ill patient. In an analysis of the current exception process, the Institute of Medicine (IOM) concluded that the dialysis exception criteria constituted a set of crude case-mix adjusters, and may not sufficiently protect providers from high, unpredictable costs (IOM 1991). HCFA should evaluate alternative methods that might provide better protection from unpredictable high costs. In the hospital inpatient PPS, for example, the outlier policy operates much like a mandatory reinsurance policy, with Medicare making additional payments to hospitals when costs for a patient exceed a DRG-specific loss threshold. In contrast, the physician fee schedule includes modifiers that a physician may apply to raise the physician work relative value when services provided are greater than those usually required for a procedure.

The payment level established should be consistent with the decisions made on the unit of payment, relative values, and payment adjustments and with the goals of providing cost-effective, high-quality care and promoting access to care. For outpatient dialysis services in the traditional Medicare program, decisions should be based on an analysis of providers' historical cost information and claims data for all services to be included in the payment for outpatient dialysis. The future availability of audited cost report information will be important to this effort.

### **Balanced Budget Refinement Act mandated MedPAC study**

The BBRA requires MedPAC to conduct a study on the appropriateness of the differential in payment for hemodialysis services furnished in a facility and dialysis services furnished in a home. This study

<sup>3</sup> The Commission has previously expressed its concern about the composite rate's lack of adjustment for longer or more frequent dialysis. In our June 1999 report, we recommended that the Secretary determine clinical criteria for dialysis patients to receive increased frequency or duration of dialysis, and the Secretary examine the feasibility of a multitiered composite rate that would allow different payments based on the frequency and duration of dialysis prescribed, as well as other factors.

will address whether the additional payment for home-based CCPD should be extended to other dialysis modalities. In the next 18 months, MedPAC will examine providers' costs and payments for each type of dialysis, and analyze the payment adjustments to the composite rate, including the payment differential between hospital-based and freestanding facilities, the adjustment for areas wage levels, and the lack of adjustment for patient case mix and other dialysis practices. MedPAC will analyze facilities' cost report data and administrative claims data. Additionally, the Commission will begin to analyze the need to broaden the prospective payment for outpatient dialysis services in the traditional Medicare program. As the first step in this process MedPAC will use administrative claims data to examine the services outside the composite rate that are billed by dialysis facilities.

### Medicare+Choice

Currently, patients with ESRD are statutorily prohibited from enrolling in M+C, although those enrolled before ESRD diagnosis may remain in their plans.<sup>4</sup>

Approximately 5 percent of Medicare patients with ESRD—20,000 patients—were enrolled in Medicare managed care plans in 1998. Payment rates for patients with ESRD enrolled in M+C plans are based on the average adjusted per capita costs of patients with ESRD under traditional Medicare in each state, reduced by 5 percent. These payments are not risk adjusted for patients' demographic or clinical characteristics. The specific methodology to calculate M+C payments is shown in Table 6-2.

However, several studies have shown that total Medicare payments for patients with ESRD enrolled in the traditional program vary based on patients' demographic and clinical characteristics and renal treatment

**TABLE  
6-2**

### Calculating payments for patients with ESRD in Medicare+Choice

- Step 1: Obtain Medicare Part A and B estimates of the costs of caring for fee-for-service ESRD patients nationwide, including patients for whom Medicare is a secondary payer and patients with functioning kidney transplants.
- Step 2: Divide total Part A and B estimates (derived in Step 1) by the projected number of fee-for-service ESRD patients, to determine Part A and B per capita costs.
- Step 3: Sum and adjust by state the Part A and B per capita costs, to account for geographic differences.
- Step 4: Remove from the state per capita cost and population data the incurred cost and enrollment of ESRD patients in prepaid plans.
- Step 5: Multiply the adjusted state per capita cost by 0.95 to yield the Medicare-risk payment rate for ESRD patients in that state.

Note: ESRD (end-stage renal disease).

Source: MedPAC analysis of information published in HCFA's Medicare health maintenance organization manual.

modalities. The U.S. Renal Data System<sup>5</sup> (USRDS) reported that payments for the care of ESRD patients differ by renal treatment modality, age, and diabetes as the cause of ESRD (USRDS 1999). Specifically, the USRDS has shown that Medicare payments:

- increase with age across all renal treatment modalities,
- are greater for ESRD patients with diabetes as the cause of renal failure, compared with those without diabetes as the cause of renal failure, and
- vary based on ESRD treatment modality.

For example, annualized Medicare per capita payments for patients with ESRD, based on treatment modality, were \$8,500 for functioning graft patients, \$47,100 for dialysis patients, \$48,900 for graft failure patients, and \$92,100 for patients undergoing kidney transplantation (Eggers 1999). The USRDS found a 33 percent increase in total Medicare payments for dialysis patients from the youngest age

group (0 to 19 years of age) to the oldest (75 years and older), and that total payments were 16 percent higher for dialysis patients with diabetes as the cause of renal failure, compared with those without diabetes as the cause of renal failure (USRDS 1999).

Under contract to HCFA, RAND developed a capitated payment method for the care of patients with ESRD that was designed to reflect the specific treatment options, clinical processes, and differences in costs of care for ESRD (Farley et al. 1994, Farley et al. 1996). It estimated risk-adjusted monthly payments for patients on maintenance dialysis or with functioning kidney grafts, and provided for lump-sum payments for patients undergoing kidney transplantation or experiencing kidney graft failure, so patients and providers would not be discouraged from choosing this high-cost treatment option.<sup>6</sup> Transplantation is the preferred ESRD treatment modality; it offers patients better quality of life and has been found to be more cost-effective than chronic dialysis (Eggers 1992). Lump-sum payments were included for kidney graft

4 Two sections of the Social Security Act bar ESRD patients from enrolling in managed care: 1851(a)(3)(B) and 1876.

5 The USRDS is operated by National Institute of Diabetes and Digestive and Kidney Diseases with support from HCFA. It collects, analyzes, and distributes in annual reports and special studies information on the incidence and prevalence of treated ESRD, modality of treatment, causes of death, patient survival, and hospitalization.

6 Patients not otherwise entitled to Medicare benefits who undergo kidney transplantation retain their ESRD entitlement to Medicare for a three-year period following transplantation.

failures because the risk of high costs from graft failure could influence decisions about care.

Overall, the payment method developed by Farley and colleagues explained more than 25 percent of the variation in ESRD patients' total payments. The model showed that renal treatment modality, age, sex, diabetes as the cause of ESRD, Medicare eligibility group (old age versus disabled), and years since onset of ESRD were significant predictors of Medicare dialysis payments. The model also found that diabetes as the cause of ESRD was the strongest risk factor for both Part A and Part B payments and that Part A payments increased with age.

### RECOMMENDATION 6A

**As soon as possible, the Secretary should risk-adjust payments for patients with ESRD enrolled in Medicare+Choice.**

This recommendation is consistent with the Balanced Budget Act of 1997's general M+C mandate for HCFA to risk-adjust capitated payments to reflect expected differences in costs among patients.

In contrast to the current M+C payment method for patients with ESRD, payments to plans participating in HCFA's ESRD demonstration project are risk adjusted. The ESRD demonstration project uses a modified capitation method that calculates separate monthly capitation rates for patients undergoing maintenance dialysis and for those with kidney grafts. It is based on the Farley et al. payment model and adjusts payments for age and whether diabetes was the cause of renal failure (Cooper et al. 1997). Table 6-3 shows how the 2000 Part A and B combined monthly risk-adjusted payments paid to the California demonstration site vary based on patient age, treatment modality, and cause of renal failure. Compared with the California average per capita payment of \$4,385 for all ESRD patients enrolled in M+C plans, monthly payments for dialysis patients enrolled in the demonstration range from \$4,213 for patients under 20 years old to \$6,004 for patients 65 years or older with diabetes as

the cause of ESRD (HCFA 2000b). Monthly payments for caring for functioning graft patients in the demonstration are less than half the California base rate and less than one-third the rate paid for dialysis patients enrolled in the demonstration.

The fact that HCFA developed a modified capitation method for the demonstration project suggests that the agency is aware of the disadvantages of the current capitated ESRD payment methodology. As soon as possible, HCFA should use the results of available studies to risk-adjust payments. In developing risk adjusters for patients with ESRD enrolled in M+C plans, HCFA should consider whether patients with ESRD should be included in the general risk-adjusted system for M+C. Specifically, the Secretary should compare how well these risk adjusters predict the payments for patients with ESRD, compared with the ESRD-specific risk adjusters. At issue is whether the increased precision that ESRD-specific risk adjusters may demonstrate in predicting total payments of ESRD patients, compared with the general risk adjusters being introduced for M+C, merits the administrative burdens and costs associated with developing a separate payment system for ESRD patients.

In designing a risk-adjusted system, HCFA will need to consider the availability of data. The ESRD-specific variables in the Farley et al. model include renal treatment modality, age, sex, diabetes as the cause of ESRD, Medicare eligibility group, and years since onset of ESRD. Duration of ESRD and underlying cause of ESRD are already collected by HCFA on its Medical Evidence Form (HCFA-2728), which is one of the key sources of data about patients with ESRD and is used to establish Medicare entitlement. HCFA requires that providers complete it within 45 days of the date of ESRD diagnosis. The form provides demographic and clinical information, including the date of the first ESRD service and the primary disease causing renal failure. Because patients may change renal treatment modality over time, information on treatment modality would have to be collected from plans on an ongoing basis. In evaluating the use of this potential risk adjuster, HCFA should consider its experience in obtaining monthly information on renal treatment modality from the three demonstration sites.

In developing this recommendation on risk adjustment, the Commission considered recommending the Secretary delay implementing risk-adjusted payment until the results of the

**TABLE 6-3**

**Medicare per capita monthly payment rate for ESRD demonstration enrollees in California, 2000**

Treatment modality	Age	Renal failure caused by diabetes	Renal failure not caused by diabetes
Dialysis	< 20	*	\$4,213
	20-64	\$5,261	4,319
	≥ 65	6,004	5,273
Functioning graft	< 20	*	1,288
	20-64	2,042	1,289
	≥ 65	2,364	1,836
Transplant**	All ages	*	14,893

Note: \*The sample size was not sufficient to create a separate payment rate for this category.

\*\*This is a three-month payment that excludes kidney acquisition costs.

Source: HCFA.

## ESRD managed care demonstration project

In its ESRD Managed Care Demonstration Project, HCFA is studying whether access to and quality of care can be enhanced by managed care. Specifically, the demonstration will test whether:

- it is feasible to have year-round open enrollment of Medicare's ESRD patients in managed care,
- integrated acute and chronic care services and case management for ESRD patients improves health outcomes,
- capitation rates reflecting ESRD patients' treatment needs increases the probability of kidney transplant, and
- additional benefits, such as transportation and nutritional services, are cost-effective.

HCFA's ESRD demonstration project is being conducted by Kaiser

Permanente in Southern California, Advanced Renal Options in Southern Florida, and Xanthus in Tennessee. Compared with Medicare+Choice plans, which receive 95 percent of the estimated per capita fee-for-service expenditures, the three plans participating in the demonstration receive 100 percent of these expenditures. The demonstration sites receive additional payment because they provide non-covered benefits, including nutritional and transportation benefits, health education and promotion activities, and prescription and over-the-counter medications. As of December 1999, 994 patients were enrolled in Kaiser, 579 patients in Advanced Renal Options, and 50 patients in Xanthus. Demonstration services are provided for three years at each site and HCFA expects the project to be completed by fall 2001. An outside contractor will evaluate the effectiveness of the program and this should be completed in May 2002. ■

update or set up a general update policy, as it does for care in acute care hospitals, skilled nursing facilities, or other facilities. Moreover, the agency does not believe it has the discretion to adjust the composite rates set by section 4201 of the OBRA-90, P. L. 101-508.

## RECOMMENDATION 6B

**The Congress should require HCFA to annually review the composite rate payment.**

In considering payment adequacy, HCFA should examine potential changes in technology, practice patterns, and market conditions. Specifically, the payment review should evaluate the current level of payment, market prices and costs, access to and quality of care, provider entry and exit, growth in the volume of services, providers' costs, revenues, and margins, and changes in the product. In estimating the projected inflation in input prices, we urge the agency to develop a dialysis-specific national input-price index—a dialysis market basket index. The market basket index tracks national average price levels for labor and other inputs, weighted to reflect the relative importance of each input category.

### Updating the Composite Rate for fiscal year 2001

The OBRA-90 required the Prospective Payment Assessment Commission (ProPAC) to study the costs of and payments for dialysis services and recommend to the Congress an annual update to the payment rate for dialysis-related facility services. That responsibility was passed to MedPAC in the BBA. MedPAC's update framework for the composite rate analyzes, changes in input prices, productivity improvements, the availability of new scientific and technological advances. Other factors MedPAC examines include market conditions and differences in the payments that dialysis facilities receive from Medicare for the services included in the composite rate bundle with their Medicare-allowable costs for these services.

demonstration project could be analyzed (see text box). The results may provide insight on the reliability of risk adjusters, how well they account for differences in costs, and whether payment should be limited to services currently covered by Medicare. Despite the potential usefulness of these results, the Commission believes it would be prudent to proceed now. Delaying the risk adjustment of payments would result in a further delay in removing the federal law prohibiting ESRD patients to enroll in M+C plans. (For the Commission's analysis of the conditions that need to be met before removing the federal law prohibiting ESRD patients to enroll in M+C plans, see this chapter's third section.) The Commission believes ESRD patients should have the same freedom of choice as all other Medicare beneficiaries to enroll in M+C plans. Consequently, the Commission recommends developing a risk-adjusted system as soon as

possible. Once the results of the demonstration project are fully analyzed, the agency can modify its payment method as necessary.

### Payment update

This section addresses the general need for HCFA to evaluate the composite rate payment on an annual basis, whether and by how much the payment should be updated in fiscal year 2001, and whether the methods to update capitated payment to M+C plans for ESRD patients should differ from those for patients without ESRD.

### Traditional Medicare Program

Despite the fact that the composite rate is a PPS, the Congress does not require HCFA to consider an annual payment

## RECOMMENDATION 6C

### For fiscal year 2001, the composite rate for outpatient dialysis services should be increased by 2.4 percent.

In considering market conditions, the Commission examined the growth and profitability of the provider community. The number of dialysis facilities in the United States continues to grow. Between 1993 and 1997, the number of dialysis units increased from 2,313 to 3,153—an 8 percent average annual rate of growth. The number of freestanding and for-profit facilities grew faster than the number of hospital-based and not-for-profit facilities. Freestanding facilities increased from 74 percent to 79 percent of all dialysis facilities during this period, while for-profit facilities increased from 62 to 69 percent. The number of freestanding, for-profit facilities increased from 61 percent of all facilities in 1993 to 68 percent in 1997.

In addition to growth in the number of facilities, there has been a continued trend toward industry consolidation. The IOM estimated that half of all for-profit facilities were affiliated with a multi-center dialysis company (chain) in 1989; by 1998, MedPAC estimates that about three-quarters of all for-profit facilities were affiliated with a chain. The number of dialysis patients receiving care from the largest chains increased from about 10 percent of all dialysis patients in 1989 to 60 percent of all dialysis patients in 1997 (Fresenius 1999, IOM 1991). The majority of these chains are publicly traded and three are vertically integrated, with their own manufacturing and clinical laboratory divisions. A MedPAC analysis of cost report data from 1998 indicates that large facilities enjoy greater economies of scale and have different labor mixes than smaller facilities (Table 6-4). These data confirm an earlier study that found economies of scale by mean facility size and chain ownership (Dor et al. 1992).

The Commission concludes that the essentially unchanged composite rate has resulted in the expansion of for-profit, multicenter companies. Because industry consolidation may allow for greater efficiencies in service delivery, Medicare's payment policy may be driving the trend of multicenter companies acquiring unaffiliated facilities.

In considering an update to the composite rate, the Commission also looked at changes in input prices. The input price component of the Commission's update framework is based on the projected increase in a market basket index for dialysis facilities, intended to measure the effect of changes in input prices on the cost of producing a dialysis treatment. Because HCFA has not developed a dialysis market basket, MedPAC constructed one by defining input categories that reflect the full range of goods and services that dialysis providers purchase.

Four cost components—capital, labor, other direct costs, and overhead—are used to develop the dialysis market basket, using data from the 1998 cost reports for freestanding facilities. Each component is weighted by its cost share or proportion of total costs. The price change for each component is measured by a proxy derived from the components of HCFA's input price indices for PPS hospitals,

skilled nursing facilities, and home health agencies. (These proxies were used because proxies specific to the dialysis industry are not available.) MedPAC's market basket analysis indicates that the prices dialysis facilities pay for their inputs will rise an estimated 2.4 percent between FY 2000 and 2001.

To estimate the productivity gains dialysis facilities can reasonably be expected to attain in the coming fiscal year, the Commission used data from Medicare cost reports from 1991 to 1998 to examine trends in a number of performance indicators. We considered four measures: the number of total treatments per full-time equivalent employee, staff mix as measured by the ratio of registered nurses to all direct patient care staff, staff mix as measured by the ratio of technicians to all direct patient care staff, and the number of in-facility hemodialysis treatments per station (Table 6-5).

Data demonstrate the productivity increases that facilities have made since 1991. Using a greater proportion of technicians than registered and licensed practical nurses and nurses aides, total treatments per full-time equivalent employee have increased over the eight-year period. However, the Commission is concerned about whether providers can continue to achieve productivity gains without compromising the quality of

**TABLE 6-4** Productivity of dialysis facilities, by facility size, 1998

Type of facility	Total dialysis treatments per FTE	In-facility hemodialysis treatments per station	Nurse-to-staff ratio	Technician-to-staff ratio
Small	721	465	0.42	0.47
Medium	721	608	0.38	0.52
Large	782	744	0.35	0.55

Note: FTE (full-time equivalent employees). Nurse-to-staff ratio and technician-to-staff ratio refer to the ratio of registered nurses and technicians, respectively, to direct patient care staff (including registered and licensed practical nurses, nursing assistants, and technicians). Information represents mean values weighted by the number of dialysis sessions reported at each facility. Small facilities are those reporting dialysis sessions less than or equal to the 25<sup>th</sup> percentile of all dialysis sessions; medium facilities are those reporting dialysis sessions greater than the 25<sup>th</sup> percentile but less than the 75<sup>th</sup> percentile of all dialysis sessions; large facilities are those reporting dialysis sessions equal to or greater than the 75<sup>th</sup> percentile of all dialysis sessions.

Source: MedPAC analysis of Medicare cost report data.

**TABLE  
6-5**

**Trends in productivity for freestanding dialysis facilities, 1991–1998**

	1991	1992	1993	1994	1995	1996	1997	1998
All facilities								
Total dialysis treatments per FTE	678	664	668	708	727	721	706	749
Nurse-to-staff ratio	0.35	0.34	0.35	0.36	0.36	0.37	0.37	0.37
Technician-to-staff ratio	0.32	0.34	0.35	0.52	0.49	0.51	0.52	0.53
In-facility hemodialysis treatments per station	651	666	661	670	665	651	660	656

Note: FTE (full-time equivalent employees). Nurse-to-staff ratio and technician-to-staff ratio refer to the ratio of registered nurses and technicians, respectively, to direct patient care staff (including registered and licensed practical nurses, nursing assistants, and technicians). Information represents mean values, weighted by the number of dialysis sessions at each facility.

Source: MedPAC analysis of Medicare cost report data.

dialysis care. In its June 1999 report, MedPAC specifically expressed its concern that Medicare payments for dialysis, which had not increased between 1991 and the passage of the BBRA, may affect the quality of care for dialysis patients (MedPAC 1999a). Despite the unchanging payment rate, HCFA- and USRDS-sponsored studies suggest that the quality of dialysis care has improved in the 1990s. (The third section of this chapter provides an overview of the quality of dialysis care.) This improvement in the quality of dialysis care suggests that productivity may be increasing even more than that assessed by the measures reported in Table 6-5. However, given its concern about the quality of dialysis care, and the expectation that improvements in the quality of dialysis care will continue, MedPAC is not recommending a productivity adjustment as part of its update recommendation for the upcoming fiscal year.

To identify new and emerging dialysis technologies, the Commission reviewed numerous data sources, including peer-reviewed literature, newsletters, newspapers, periodicals and trade journals. This review does not suggest upcoming changes in the overall rate at which facilities adopt quality-enhancing, cost-increasing technologies, compared with the previous fiscal year. Consequently, we recommend no adjustment for scientific and technological advances.

Lastly, the Commission considered the adequacy of the prospective payment associated with services included in the composite rate bundle. Since 1990, when Congress mandated ProPAC to study the cost of and payments for dialysis services, the Commission has used data from Medicare cost reports to assess the overall adequacy of the composite rate. In the past, the Commission has questioned the quality of the cost report data, partly because of a 1991 HCFA audit that found actual costs in freestanding facilities to be 12.2 percent lower than reported. The Commission also continues to be concerned about the accuracy of cost reports filed by hospital-based providers, as the costs reported by these providers far exceed those reported by freestanding facilities. There is no conclusive evidence indicating that hospital-based facilities treat sicker patients (on an outpatient basis) than freestanding facilities do. Hospital-based facilities' higher costs may reflect difficulties in separating the costs of outpatient and inpatient dialysis services, but this would not justify higher payments.

In its analyses for FY 1999 and 2000 and in the analysis presented in this section, the Commission used only Medicare cost report data from freestanding facilities—a choice based on the assumption that cost reports for freestanding facilities have become more accurate in recent years. HCFA has employed a number of mechanisms to improve the quality of these data, including the use of a new cost

report. The dialysis facility industry, including the National Renal Administrators Association, also has made efforts to improve the quality of cost report data.

Using cost report data from freestanding facilities for calendar years 1991 through 1998, the Commission evaluated the adequacy of composite rate payments by calculating the Medicare payment-to-cost ratio, which compares the payments (composite rate) facilities receive from Medicare for dialysis treatments with their Medicare-allowable costs. Weighted mean payment-to-cost ratios are presented by dialysis modality for 1991 to 1998 in Table 6-6.

In interpreting the data, it is important to recognize that these data compare only payments and costs associated with the composite rate, and do not include Medicare payments or costs associated with separately billable services. As discussed earlier, separately billable services represent a substantial portion of total payments to facilities and including the payments and costs from these services might alter the ratios set forth in Table 6-6. The Medicare dialysis facility cost reports include Medicare-allowable costs for separately billable services, but not their associated payments. To include these data in payment-to-cost ratio analyses requires merging cost report data with administrative claims data.

The Commission believes that it is important to broaden its adequacy analysis

**TABLE  
6-6**

**Payment-to-cost ratios for composite rate payments for freestanding dialysis facilities, by dialysis modality and facility characteristics, 1991-1998**

	1991	1992	1993	1994	1995	1996	1997	1998
Hemodialysis only	1.16	1.15	1.13	1.06	1.03	1.02	1.00	0.98
Urban	1.16	1.15	1.14	1.06	1.04	1.02	1.00	0.99
Rural	1.15	1.15	1.14	1.05	1.03	1.01	0.99	0.96
Not-for-profit	1.06	1.04	1.06	1.05	0.98	0.97	0.94	0.92
For-profit	1.18	1.17	1.15	1.06	1.04	1.03	1.01	0.99
Small	1.08	1.07	1.03	0.97	0.95	0.92	0.90	0.88
Medium	1.14	1.12	1.11	1.04	1.02	1.01	0.99	0.97
Large	1.20	1.19	1.18	1.10	1.06	1.05	1.03	1.02
Hemodialysis+CAPD	1.19	1.17	1.15	1.07	1.06	1.03	1.00	0.99
Urban	1.19	1.17	1.16	1.07	1.06	1.03	1.01	0.99
Rural	1.17	1.16	1.12	1.05	1.04	1.01	0.99	0.96
Not-for-profit	1.11	1.07	1.09	1.06	1.00	0.98	0.96	0.93
For-profit	1.20	1.19	1.17	1.07	1.06	1.04	1.01	1.00
Small	1.10	1.09	1.07	1.00	0.97	0.93	0.91	0.88
Medium	1.16	1.14	1.12	1.04	1.03	1.00	0.99	0.97
Large	1.23	1.21	1.19	1.11	1.09	1.06	1.04	1.02
Hemodialysis, CAPD, CCPD	NA	NA	NA	1.07	1.06	1.03	1.01	0.99
Urban	NA	NA	NA	1.08	1.07	1.03	1.01	0.99
Rural	NA	NA	NA	1.06	1.05	1.01	0.99	0.96
Not-for-profit	NA	NA	NA	1.09	1.00	0.99	0.96	0.93
For-profit	NA	NA	NA	1.07	1.07	1.04	1.01	1.00
Small	NA	NA	NA	0.99	0.97	0.93	0.91	0.89
Medium	NA	NA	NA	1.05	1.03	1.01	0.99	0.97
Large	NA	NA	NA	1.11	1.10	1.07	1.04	1.03

Note: NA (not available). CAPD (continuous ambulatory peritoneal dialysis). CCPD (continuous cycling peritoneal dialysis). These data compare only the payments and costs associated with the composite rate, not payments and costs from separately billable services. The calculations represent mean payment-to-cost ratios, weighted by the number of dialysis sessions at each facility. The size of the facility is defined in each year based on the 25<sup>th</sup> and 75<sup>th</sup> percentile of dialysis sessions. Small facilities are those reporting dialysis sessions less than or equal to the 25<sup>th</sup> percentile of all dialysis sessions; medium facilities are those reporting dialysis sessions greater than the 25<sup>th</sup> percentile but less than the 75<sup>th</sup> percentile of all dialysis sessions; large facilities are those reporting dialysis sessions equal to or greater than the 75<sup>th</sup> percentile of all dialysis sessions. Information on the costs of CCPD were not available on cost reports before 1994.

Source: MedPAC analysis of Medicare cost report data.

to include separately billable services; these services are associated with the dialysis treatment and may affect facilities' profit margins. Consequently, MedPAC is currently analyzing payment-to-cost ratios that include both composite rate and separately billable services, and anticipates the results will be available in our March 2001 report.

Data from 1998 cost reports indicate that the composite rate payment to freestanding facilities did not cover Medicare costs in that year. The payment-to-cost ratio for the three major dialysis modalities fell from 1.03 in 1996 to 1.01 in 1997 and 0.99 in 1998. Additionally, costs incurred varied by dialysis modality. For example, in 1998, dialysis facilities'

mean cost of providing an in-facility hemodialysis session was \$131, compared with \$119 for continuous ambulatory peritoneal dialysis and continuous cycling peritoneal dialysis sessions.

As mentioned above, the Commission recommends a 2.4 percent update to the composite rate for outpatient dialysis

facilities in fiscal year 2001. This recommendation assumes that the FY 2000 payment level is correct. MedPAC recommended payment updates for FY 1998 and 1999 of 2.7 percent and 2.4 percent to 2.9 percent, respectively, but neither the Congress nor HCFA acted upon these recommendations. In the BBRA, the Congress mandated a 1.2 percent increase to the composite rate on January 1, 2000 and another 1.2 percent increase on January 1, 2001. To be consistent with the BBRA's time period—a calendar year—for increasing the composite rate, MedPAC also calculated the dialysis market basket on a calendar year basis and, as in the fiscal year analysis, found a 2.4 percent increase in input prices in calendar years 2000 and 2001. Based on this analysis and the other analyses described above, MedPAC recommends that the composite rate for outpatient dialysis services be increased by 2.4 percent for calendar year 2001. The BBRA has already increased the composite rate by 1.2 percent for calendar year 2001; therefore, we recommend that the composite rate be increased by an additional 1.2 percent.

To evaluate whether reported costs are correct, audited cost report data are needed. For the last eight years, HCFA has not audited facilities' cost report data, but it is currently in the process of auditing data from 1996. MedPAC urges HCFA to continue this effort by auditing future years' cost report data, as such data will be invaluable to the Commission as it evaluates the level of the composite rate, updates to it, and the need to reform the ESRD payment system.

## Medicare+Choice

Updates to the capitated payments for patients with ESRD are calculated using the same methods used for non-ESRD patients. M+C plans currently receive payment updates as specified in the BBA, which established a floor below which rates cannot fall and a minimum annual

update of 2 percent for each area. At this time, the Commission does not see any evidence that the update process for the capitated payments for patients with ESRD should be different than the update process for patients without ESRD.

---

## Access to and quality of dialysis care

---

Two primary objectives of Medicare's ESRD payment policies are to ensure that patients receive cost-effective, quality care through the most suitable modality in the most suitable setting and to ensure that they have adequate access to care. As part of its overall examination of the adequacy of ESRD payments, the Commission reviewed available information about access to and quality of dialysis care, with the goal of evaluating whether patients with ESRD are experiencing difficulties in obtaining high-quality necessary medical care in traditional Medicare or M+C. We present our findings to set the stage for a discussion of the federal law that prohibits patients with ESRD from enrolling in M+C, this law's affect on access to care, and conditions that need to be met before the prohibition is removed.

## Quality of dialysis care

Data from HCFA and other sources suggest that the quality of dialysis care has generally improved in the 1990s. HCFA oversees the quality of ESRD services through its ESRD Health Care Quality Improvement Program. In general, quality of dialysis care has been evaluated by examining trends in: 1) patients' clinical intermediate outcomes, including the adequacy of dialysis and patients' anemia levels and nutritional status, 2) morbidity, measured by rates of hospital discharge, and 3) mortality.

The ongoing collection of data and analysis of intermediate outcomes, morbidity, and mortality for patients with ESRD greatly exceeds the collection of similar data for other Medicare patients.

Since 1994, data on intermediate outcomes have been collected annually for a representative sample of dialysis patients treated at Medicare-certified facilities. Data on hospitalization rates and mortality are also routinely collected and analyzed annually. The annual morbidity analyses are specific to patients with ESRD enrolled in the traditional Medicare program, while mortality is analyzed for all patients with ESRD.

The measured adequacy of dialysis and the anemia status of dialysis patients have steadily improved during the last five years (HCFA 1998). Overall, the mean number of hospital admissions for dialysis patients remained stable from 1993 through 1996, ranging from 1.45 to 1.49 per calendar year per dialysis patient (USRDS 1998). The adjusted annual death rate for dialysis patients fell to 22 deaths per 100 patient-years in 1996, from 26 deaths per 100 patient-years in 1989 (USRDS 1998).

Furthermore, limited data suggest that the quality of care provided by managed care and traditional Medicare, as determined by intermediate outcomes, is similar. One study, conducted by HCFA in 1997, compared selected intermediate outcomes of adult in-center hemodialysis patients enrolled in managed care with outcomes of similar patients enrolled in traditional Medicare. Patients enrolled in managed care were more likely to be older (69.6 versus 59.6 years), white (68 versus 51 percent), and have diabetes as their primary cause of ESRD (47 versus 39 percent).<sup>7</sup> Study results suggest that intermediate outcomes (adequacy of dialysis, anemia levels, and serum albumin levels) of patients enrolled in managed care plans do not differ from those of patients enrolled in the traditional Medicare program (HCFA 1999). Logistic regression analyses, adjusting for demographic and clinical characteristics (such as duration of dialysis and pre-dialysis weight), found no difference in the proportion of managed care patients achieving adequate health status indicators

---

<sup>7</sup> Patients with ESRD who are enrolled in a managed care plan must be Medicare-entitled before becoming ESRD-entitled. This requirement may explain why ESRD patients enrolled in managed care are older and more likely to have diabetes as their underlying cause of renal failure than are ESRD patients enrolled in the traditional Medicare program.

(kt/v  $\geq$  1.2, hematocrit levels  $\geq$  33 percent, and serum albumin levels  $\geq$  3.5 or 3.2, by BCG or BCP method, respectively), compared with patients enrolled in traditional Medicare.

## Access to care

HCFA's assessment of ESRD patients' access to care is primarily carried out by the USRDS in their annual data reports, conducted since 1989. The USRDS examines trends in the use of services (particularly the use of renal treatment modalities and hospital services), the number of outpatient suppliers of dialysis, and the level of Medicare payments. The USRDS has also periodically conducted studies evaluating other issues related to patient access, including access to supplemental insurance. In addition to the efforts by the USRDS, other governmental bodies, including the OIG and the Agency for Health Research and Quality, and private researchers have periodically examined ESRD patients' access to care. We describe what is known about the number of dialysis providers and ESRD patients' access to care, including use of services, access to supplemental insurance, and perceptions of access, and make a recommendation for the further collection of data on access to care.

## Use of services

In its annual analyses, the USRDS has reported decreases in the use of home peritoneal dialysis since the late 1980s (USRDS 1999). Additionally, MedPAC found that the overall use of home dialysis has decreased from 14 percent of all dialysis patients in 1993 to 11 percent in 1997. This downward trend is occurring despite the same Medicare payment rate for home dialysis and in-facility hemodialysis and Medicare's stated policy goal on renal treatment modalities, which is to enable ESRD patients to use the dialysis modality for which they are best suited. The USRDS and other researchers, however, have reported numerous factors that affect choice of dialytic therapy, including patient age, distance from a center, functional independence, education level, comorbid conditions, and providers' preferences (USRDS 1999).

Hospitalization rates may also reflect patient access to care because patient morbidity significantly affects the frequency and duration of hospital care. The USRDS has reported that the mean number of hospital admissions for dialysis patients remained stable from 1993 through 1996 (USRDS 1998). Other researchers have reported that ESRD patients are frequently hospitalized for complications of dialysis and for underlying causes of ESRD, including diabetes and cardiovascular conditions (Thamer et al. 1996).

## Availability of supplemental insurance

Among all Medicare patients, the lack of supplemental insurance has been linked to delays in seeking care. During the last five years, the USRDS has conducted two analyses on the extent of supplemental insurance among patients with ESRD. These analyses indicate that in 1993, about 11 percent of incident patients enrolled in Medicare had no other source of insurance; by 1996, 24 percent of these patients had no other source of insurance (USRDS 1996, USRDS 1997).

Two studies have linked increased use of medications (including erythropoietin) to the availability of supplemental insurance (Shih 1999, Thamer et al. 1996). Being able to obtain supplemental insurance may be especially important for patients with ESRD, as their out-of-pocket Medicare costs averaged nearly \$10,000 per patient in 1997 (USRDS 1997). The annual copayments associated with outpatient dialysis sessions and erythropoietin represent about half of this total.

Patients with ESRD may experience greater difficulty in the future in obtaining supplemental insurance compared with non-ESRD patients. AARP, a major source of supplemental insurance covering more than 30,000 individuals with ESRD, announced in 1999 that it will no longer offer policies for patients with ESRD outside guaranteed access provisions in federal and state laws. AARP adopted this policy to avoid significant premium increases for its Medigap policyholders. Although the BBA extended guaranteed issue rights for

Medigap policies to specific groups of Medicare patients ages 65 years and older (Chapter 2 provides a detailed description of these issue rights), Medicare patients under age 65 are not statutorily provided these same rights. Only 18 states require companies that sell Medigap insurance to provide such coverage to individuals under 65 who are entitled to Medicare benefits because of a disability or ESRD.

## Patients' perceptions about access to care

Patients' perceptions about access to care is considered an important indicator of access to care and is viewed as having implications for delivering services more efficiently and in ways that better serve patients' needs (Donabedian 1988, Ware et al. 1978, Williams 1994). In a study examining access to care in Medicare managed care plans, the Office of Inspector General found that, compared with aged Medicare disenrollees, ESRD patients who disenrolled from managed care were more likely to report that: the medical care provided by the plan caused their health to worsen, they had limited access to some medical services, and they did not receive referrals to specialists when necessary (OIG 1995). In contrast, the OIG found that ESRD disenrollees had shorter waiting times for scheduled appointments with their primary care physicians, compared with aged disenrollees.

Recently, the Agency for Health Research and Quality funded a patient outcomes research team, Choices for Healthy Outcomes in Caring for ESRD, to evaluate the aspects of dialysis care that are most important to ESRD patients undergoing dialysis (Rubin et al. 1997). Specific domains and aspects of dialysis care were ranked through a series of patient focus groups. The authors found that dialysis patients were most concerned about their interactions with health care professionals, the training of health care professionals, and the availability of educational materials.

In another recent study, 148 dialysis patients were surveyed about their overall satisfaction with care as well as six

components of quality of care, including the availability of doctors, technical skill, personal manner, explanations provided, amount of time spent with physicians, and how much they were helped (Alexander and Sehgal 1998). Although dialysis patients generally rated highly the care they received from nephrologists and other physicians, their satisfaction with physicians' explanations and the amount of time spent with physicians received the lowest ratings. In terms of patient characteristics, increased patient age, African-American race, and care for acute illnesses were associated with lower ratings of quality of care.

### **Supply of outpatient dialysis providers**

The availability of providers is crucial in ensuring that patients have the care they need. In its annual reports, the USRDS has reported the same trend the Commission has found; namely, the growth of for-profit and chain facilities over the last decade. In addition to the growth in the number of dialysis facilities, the Commission has also looked at the types of services they offer. MedPAC's analysis of the availability of the full range of dialysis modalities, using 1993–1997 data from HCFA's facility survey, suggests that certain facilities do not offer all treatment modalities. Although nearly all facilities offered in-facility hemodialysis, the availability of CAPD and CCPD differed in rural and urban areas. In 1997, 62 and 50 percent of facilities in urban areas offered CAPD and CCPD, respectively, compared with 41 and 32 percent of facilities in rural areas. Similar differences were found between 1993 and 1996. There were more small facilities in rural areas than in urban areas (15.3 percent of the total number of facilities versus 3.2 percent, respectively), and small facilities were less likely to offer CAPD and CCPD.

### **Need for additional monitoring of access to care**

Despite studies evaluating access to care by examining patients' use of dialysis services, their perceptions of health care,

and the supply of dialysis providers, the Commission believes there are some deficiencies in the data needed to evaluate access to care on a regular basis for ESRD patients enrolled in either the traditional Medicare program or Medicare+Choice. For ESRD patients, there are no systems in place to collect regularly and analyze data on:

- the kinds of care they are receiving by non-dialysis providers for the treatment of ESRD and its comorbidities,
- the effect of the availability of supplemental insurance on their use of health care services, and
- their perceptions of access to care.

## **RECOMMENDATION 6D**

### **HCFA should collect information on ESRD patients' satisfaction with the quality of and access to care.**

Although the findings of the ongoing quality-of-care evaluations are generally reassuring, MedPAC believes that information about ESRD patients' satisfaction with access to services and quality of care in the traditional Medicare program and M+C plans should regularly be collected and analyzed. This would enable policymakers and providers to identify access problems and vulnerable subpopulations among patients with ESRD.

In particular, HCFA should examine the feasibility of routinely collecting information on health system characteristics known to affect access to care, such as access to supplemental insurance. This is particularly needed because of recent changes in the availability of private supplemental insurance available to ESRD patients. Information about whether ESRD patients have trouble getting care or have delayed care due to cost is neither routinely collected nor studied in either the traditional Medicare program or M+C plans.

Additionally, HCFA should look into the feasibility of routinely collecting information on ESRD patients'

satisfaction with dialysis and non-dialysis services. Obtaining and analyzing this information on a regular basis is needed, given the results of the previously discussed studies evaluating patients' perceptions of and satisfaction with care.

For all Medicare patients, the Medicare Current Beneficiary Survey (MCBS) is often used to evaluate the effect of patients and health system characteristics on use of services and satisfaction with care. The sample of patients with ESRD included in the MCBS, however, is too small for any detailed statistical analysis.

In collecting information on ESRD patients' satisfaction and access to care, HCFA would need to address whether disease-specific questions should be used or whether generic questions, such as those fielded for the MCBS, should be used. Several kidney-disease-specific instruments have already been developed to collect information on ESRD patients' functional and health status, health-related quality of life, and satisfaction with care (Hays et al. 1994, Powe et al. 1996). HCFA should compare these disease-specific instruments to available generic instruments to assess relevant health domains. In determining the size and scope of the data collection effort, HCFA should consider how well the survey data will detect access problems within specific groups of ESRD patients, such as those with no supplemental insurance or those residing in rural areas. Finally, HCFA would need to determine who would collect this information. The 18 regional ESRD Networks should be considered; they have ongoing efforts to collect information on dialysis outcomes for a nationwide sample of ESRD patients.

When collecting data on satisfaction with care, HCFA should also examine obstacles providers may face in offering all forms of dialysis modalities. MedPAC is concerned about a lack of access to the full range of available modalities.

### **Enrolling patients with ESRD in Medicare+Choice**

The current federal statute barring ESRD patients from enrolling in M+C stems

from concern about the special care needs of the ESRD population and the limited experience of some plans in caring for ESRD patients. Additionally, there are concerns about the adequacy of the current payment system, because payments to plans are not yet risk adjusted.

A related enrollment issue concerns patients with ESRD who were members of plans that reduced their service areas or did not renew their contracts in 2000. HCFA gave these patients the option of receiving benefits from the traditional Medicare program as of January 1, 2000, or enrolling in one of the three ESRD managed care demonstrations (HCFA 2000a). These patients were not given the option to enroll in local M+C plans.

There are a number of advantages to permitting patients with ESRD to enroll in M+C. First, lifting the bar would provide patients with ESRD the same freedom of choice that all other Medicare beneficiaries have. Currently, patients with ESRD are the only group of beneficiaries specifically denied enrollment in this program; patients with other chronic and long-term conditions are permitted to enroll. Even the frail elderly are permitted to enroll in M+C or one of several created targeted programs for the care of frail Medicare patients, including the Program of All-Inclusive Care for the Elderly and the Social Health Maintenance Organization and EverCare programs.

Second, lifting the bar may specifically benefit patients with low income levels and those unable to obtain supplemental insurance. As discussed previously in this chapter, patients with ESRD enrolled in the traditional Medicare program have significant out-of-pocket expenses and enrolling in private supplemental plans is becoming more difficult.

Third, the potential exists for M+C to benefit patients with ESRD by redistributing resources to address patient needs and by providing integrated, coordinated care. Moving away from the fee-for-service payment mechanism may allow for creative approaches in managing

patient care. For example, it may increase providers' ability to participate in clinical activities in addition to dialysis—such as vascular access care—that may enhance patient care. As previously discussed, HCFA's 1997 analysis indicated no differences between the dialysis outcomes of ESRD patients enrolled in the traditional Medicare program and those in M+C.

Two issues need to be addressed in considering whether to lift the bar. The first is the need to modify the current capitated payment system by risk-adjusting payments. As discussed above, the Commission recommends that HCFA develop a risk-adjusted payment system for patients enrolled in M+C.

The second issue is the need to monitor the quality of care for patients with ESRD enrolled in M+C. Both the adequacy of dialysis and dialysis patients' anemia status have improved during the last decade. However, HCFA does not routinely collect information or compare quality of care for patients enrolled in M+C or the traditional Medicare program. Collecting these data on a sample of patients enrolled in traditional Medicare and M+C could help continue the trend of improved dialysis outcomes. Additionally, as demonstrated by HCFA's 1997 evaluation of outcomes by insurance type, it appears feasible to compare dialysis outcomes between patients enrolled in the traditional Medicare program and those in M+C.

The Commission believes that HCFA should routinely compare dialysis outcomes for patients enrolled in the traditional Medicare program and those in M+C through its ESRD Health Care Quality Improvement Program. Conducting such a project would most likely require additional collaboration between HCFA and the 18 ESRD Networks. HCFA could create an annual representative sample of patients enrolled in traditional Medicare and M+C, and the Networks could work with the facilities to abstract the data from Medicare-certified dialysis facilities. HCFA could then synthesize and analyze the data and

annually publish the results of the comparison. It is not expected that this data collection project would require additional information from M+C plans.

## RECOMMENDATION 6 E

**Once HCFA has implemented a risk-adjusted payment system and a system to monitor and report on the quality of care, the Congress should lift the bar prohibiting patients with ESRD from enrolling in Medicare+Choice.**

The Commission believes that lifting the bar should be based on ensuring that plans receive appropriate payment for patients with ESRD and developing a quality monitoring and reporting system that routinely compares dialysis outcomes of patients enrolled in M+C and with those in the traditional Medicare program. If the prohibition is lifted without making these changes, incentives might influence access to high-quality care for some patients with ESRD.

The conference agreement on Medicare provisions incorporated into the BBRA addressed this issue and concluded:

The parties to the agreement also believe Medicare enrollees with end-stage renal disease (ESRD) could benefit by being offered the opportunity to enroll in M+C plans. However, the parties to the agreement understand that the current risk adjuster may not adequately reflect the varying costs of these patients and requests further information from the Secretary so that it might address this issue in the future. The parties to the agreement also encourage the Secretary to develop proposed quality of care requirements for Medicare beneficiaries with ESRD in this report (U.S. Congress 1999).

Another issue regarding monitoring the quality of care for patients with ESRD enrolled in M+C is whether plans should be required to collect information on non-dialysis processes of care and outcomes for ESRD patients. Currently, in its Quality Improvement System for Managed Care, HCFA requires M+C

plans to report selected performance measures from the Health Plan Employer Data and Information Set (HEDIS) relevant to the Medicare managed care population, and to participate in the Medicare Consumer Assessment of Health Plans Study, which measures and reports consumer experience with specific aspects of plans, and the Health Outcomes Survey, which measures the health status of a sample of Medicare plan enrollees. The HEDIS measures for 2000 include selected processes of care, such as controlling high blood pressure, beta blocker treatment after a heart attack, and comprehensive diabetes care; access to preventive and ambulatory health services; health plan stability; and use of medical services, including the frequency of selected procedures and inpatient use. The HEDIS measures on diabetes and cardiovascular care are relevant to assessing the quality of ESRD care, due to the high frequency of these conditions among ESRD patients. The Commission believes that developing any new HEDIS measures or other efforts to monitor the quality of care of M+C plans should be adopted by HCFA consistent with current Medicare policies and processes.

A final enrollment issue that MedPAC considered is whether ESRD patients enrolled in a M+C plan that is withdrawing in 2000 should be given the option to enroll in another M+C plan in the same market area. The Commission is particularly concerned about the significant out-of-pocket costs these patients may incur when forced to return to the traditional Medicare program. Additionally, the BBA extended guaranteed issue rights only to patients at least 65 years old who involuntarily leave the M+C plan because their plan's Medicare contract is terminated, they move out of the service area, or they terminate their enrollment for cause. Federal law does not guarantee access to Medigap coverage for patients under age 65, and only 18 states require companies to sell Medigap coverage to these patients.

#### **RECOMMENDATION 6F**

**ESRD patients who lose Medicare+Choice coverage because their plan leaves the area should be permitted to enroll in another Medicare+Choice plan.**

No analyses have addressed the effect of the M+C plan withdrawals on patients

with ESRD. In particular, there is no information about whether ESRD patients have been affected by the transition from a managed care plan to traditional Medicare in terms of their out-of-pocket costs, access to supplemental benefits (such as prescription drugs), and continuity of care.

Recent evidence suggests that among those Medicare beneficiaries involuntarily disenrolled from a managed care plan at the end of 1998, those under age 65 and disabled and those in fair or poor health were less likely to purchase Medigap insurance, compared with patients at least 65 years old and those in excellent or very good health, respectively (Laschober et al. 1999). Laschober and colleagues also reported that Medicare beneficiaries who returned to the traditional program reported higher out-of-pocket costs and fewer supplemental benefits than did beneficiaries enrolling in another managed care plan. ■

## References

---

- Alexander GC, Sehgal AR. Dialysis patient ratings of the quality of medical care, *American Journal of Kidney Diseases*. August 1998, Vol. 32, No. 2, p. 284–289.
- Committee for the Study of the Medicare ESRD Program, Institute of Medicine. *Kidney failure and the federal government*. Washington (DC), National Academy Press. 1991.
- Cooper BS, Eggers PW, Edington BM. Development of an end-stage renal disease managed care demonstration, *Advances in Renal Replacement Therapy*. October 1997, Vol. 4, No. 4, p. 332–339.
- Donabedian A. The quality of care: How can it be assessed? *Journal of the American Medical Association*. September 23-30, 1988, Vol. 260, No. 12, p. 1743–1748.
- Dor A, Held PJ, Pauly MV. The Medicare cost of renal dialysis, *Medical Care*. October 1992, Vol. 30, No. 10, p. 879–891.
- Eggers PW, Health Care Financing Administration, Department of Health and Human Services. E-mail to Nancy Ray, MedPAC. Washington (DC). August 10, 1999.
- Eggers PW. Comparison of treatment costs between dialysis and transplantation, *Seminars in Nephrology*. May 1992, Vol. 12, No. 3, p. 284–289.
- Farley DO, Carter GM, Kallich JD, et al. Modified capitation and treatment incentives for end stage renal disease, *Health Care Financing Review*. Spring 1996, Vol. 17, No. 3, p. 129–142.
- Farley DO, Kallich JD, Carter GM, et al. *Designing a capitation payment plan for Medicare end stage renal disease services*. Santa Monica (CA), RAND. 1994.
- Fresenius Medical Care. *Fresenius medical care overview*. Washington (DC), Fresenius Medical Care. February 1999.
- General Accounting Office. Medicare dialysis patients: Widely varying lab test rates suggest need for greater HCFA scrutiny, GAO/HEHS-97-202. Washington (DC), GAO. September 1997.
- General Accounting Office. Enrollment growth and payment practices for kidney dialysis services, GAO/HEHS-96-33. Washington (DC), GAO. November 1995.
- Greer JW, Milam RA, Eggers PW. Trends in use, cost, and outcomes of human recombinant erythropoietin, 1989-98, *Health Care Financing Review*. Spring 1999, Vol. 20, No. 3, p. 55–62.
- Hays RD, Kallich JD, Mapes DS, et al. Development of the kidney disease quality of life (KDQOL) instrument, *Quality Life Research*. October 1994, Vol. 3, No. 5, p. 329–338.
- Health Care Financing Administration, Department of Health and Human Services. Important notice to Medicare beneficiaries with end-stage renal disease (ESRD). Baltimore (MD), HCFA. January 19, 2000a, available at <http://www.hcfa.gov/medicare/costesrd.htm>.
- Health Care Financing Administration, Department of Health and Human Services. Intermediary manual part 3, chapter II—coverage of services. Baltimore (MD), HCFA. January 18, 2000b, available at [http://www.hcfa.gov/pubforms/13\\_int/a3165.htm](http://www.hcfa.gov/pubforms/13_int/a3165.htm).

Health Care Financing Administration, Department of Health and Human Services. ESRD managed care demonstration. December 22, 1999a, available at <http://www.hcfa.gov/quality/3c.htm>.

Health Care Financing Administration, Department of Health and Human Services. Medicare health maintenance organization manual, publication #75. November 1999b, available at <http://www.hcfa.gov/pubforms/progman.htm>.

Health Care Financing Administration, Department of Health and Human Services. Comparison of demographic and selected intermediate outcome measures for health maintenance organization (HMO) and fee-for-service (FFS) adult in-center hemodialysis patients, supplemental report #1, 1998 ESRD core indicators project. Washington (DC), HCFA. February 1999c.

Health Care Financing Administration, Department of Health and Human Services. Highlights from the 1998 ESRD core indicators project. Baltimore (MD), HCFA. September 1998.

Health Care Financing Administration, Department of Health and Human Services. Medicare program: end-stage renal disease (ESRD) payment exception requests and organ procurement costs, Federal Register. August 15, 1997, Vol. 62, No. 158, p. 43657–43674.

Held PJ, Garcia JR, Pauly MV, et al. Price of dialysis, unit staffing, and length of dialysis treatments, American Journal of Kidney Diseases. May 1990, Vol. 15, No. 5, p. 441–450.

Hirth RA, Held PJ, Orzol SM, et al. Practice patterns, case mix, Medicare payment policy, and dialysis facility costs, Health Services Research. February 1999, Vol. 33, No. 6, p. 1567–1592.

Laschober MA, Neuman P, Kitchman MS, et al. Medicare HMO withdrawals: What happens to beneficiaries? Health Affairs. November/December 1999, Vol. 18, No. 6, p. 150–157.

Medicare Payment Advisory Commission. Report to the Congress: selected Medicare issues. Washington (DC), MedPAC. June 1999a.

Medicare Payment Advisory Commission. Report to the Congress: Medicare payment policy. Washington (DC), MedPAC. March 1999b.

Office of Inspector General. Review of separately billable end-stage renal disease laboratory tests, A-01-96-00513. Washington (DC), OIG. October 1996.

Office of Inspector General. Beneficiary perspectives of Medicare risk HMOs, OEI-06-00730. Washington (DC), OIG. March 1995.

Office of Inspector General. Cost of dialysis-related drugs, No. A-01-91-00526. Washington (DC), Department of Health and Human Services. October 1992.

Powe NR, Klag MJ, Sadler JH, et al. Choices for health outcomes in caring for end-stage renal disease, Seminars in Dialysis. January/February 1996, Vol. 9, No. 1, p. 9–11.

Rubin HA, Jenckes M, Fink NE, et al. Patient's view of dialysis care: development of a taxonomy and rating of importance of different aspects of care, American Journal of Kidney Diseases. December 1997, Vol. 30, No. 6, p. 793–801.

Shih YT. Effect of insurance on prescription drug use by ESRD beneficiaries, *Health Care Financing Review*. Spring 1999, Vol. 20, No. 3, p. 39–54.

Thamer M, Richard C, Ray NF, et al. The effect of insurance status on use of recombinant erythropoietin therapy among end-stage renal disease patients in three states, *American Journal of Kidney Diseases*. August 1996, Vol. 28, No. 2, p. 235–249.

U.S. Congress. Conference agreement on Medicare provisions incorporated by reference into HR 3194, District of Columbia Appropriations Act, which were introduced as HR 3426, the Medicare, Medicaid, and SCHIP Balanced Budget Refinement Act of 1999. November 17, 1999.

U.S. Renal Data System. USRDS 1999 annual data report. Bethesda (MD), National Institute of Diabetes and Digestive and Kidney Diseases. April 1999.

United States Renal Data System. USRDS 1998 annual data report. Bethesda (MD), National Institute of Diabetes and Digestive and Kidney Diseases. April 1998.

United States Renal Data System. USRDS 1997 annual data report. Bethesda (MD), National Institute of Diabetes and Digestive and Kidney Diseases. April 1997.

United States Renal Data System. USRDS 1996 annual data report. Bethesda (MD), National Institute of Diabetes and Digestive and Kidney Diseases. April 1996.

Ware JE, Davies-Avery A, Stewart AL. The measurement and meaning of patient satisfaction, *Health and Medicare Care Services Review*. January/February 1978, Vol. 1, No. 1, p. 2–15.

Williams B. Patient satisfaction: a valid concept? *Social Science and Medicine*. February 1994, Vol. 38, No. 4, p. 509–516.

A P P E N D I X

A

---

**Impact of MedPAC's recommendations  
for reforming the disproportionate  
share hospital adjustment**

---



# Impact of MedPAC’s recommendations for reforming the disproportionate share hospital adjustment

In previous years, MedPAC proposed a minimum value, or threshold, for the low-income share a hospital must have before payment is made and suggested that a reasonable range for this threshold would allow between 50 percent and 60 percent of hospitals to be eligible for a payment. However, based on MedPAC’s most recent analysis, the Commission has revised its recommendation to a level that makes 60 percent of hospitals eligible to receive a disproportionate share (DSH) payment. Below are additional tables to supplement our Chapter 3 analysis of the impact of this change.

Under MedPAC’s proposal, when the minimum low-income share for eligibility is reduced from the level that makes 50 percent of hospitals eligible to the level that makes 60 percent eligible, there is a negligible change in total PPS payments (Table A-1). Most noteworthy is that hospitals with the lowest current total margins would experience a slight decline in the degree to which they are helped by MedPAC’s proposal—from 1.3 percent to 1.1 percent.

Table A-2 reveals no change in the overall shift of PPS payments from urban to rural hospitals when the minimum low-income share for eligibility is reduced, although there are some changes among urban and rural subgroups. Under both threshold options, the decline in total PPS payments is generally lower for large urban hospitals than for other urban hospitals. Hospitals designated as small rural Medicare dependent hospitals, rural referral centers or sole community

providers would have somewhat smaller increases in total PPS payments, compared with other rural hospitals. Because of their special designation, these hospitals currently receive a higher percentage add-on under existing policy and thus would not gain as much from the change in policy.

When eligibility is expanded from 50 percent to 60 percent of hospitals, academic medical centers (AMCs) drop

**TABLE A-1** Percentage change in total payments due to recommended disproportionate share policy changes, by threshold and total margin quartile

Total margin quartile	Threshold making 50% eligible	Threshold making 60% eligible
1 <sup>st</sup> quartile (lowest margins)	1.3	1.1
2 <sup>nd</sup> quartile	-0.2	-0.2
3 <sup>rd</sup> quartile	-0.4	-0.3
4 <sup>th</sup> quartile (highest margins)	-0.4	-0.4

Source: MedPAC analysis of 1997 data from Medicare cost reports and the American Hospital Association Annual Survey of Hospitals.

from a 0.2 percent increase to a -0.4 percent decrease (Table A-3). At the same time, major teaching hospitals other than AMCs drop from no change to a -0.5 percent decline in total PPS payments. Although many of these hospitals provide a disproportionate amount of uncompensated care, the modest decline in total PPS payments is not unexpected, given the shift in payments from urban to rural hospitals under MedPAC's proposal.

A 60-percent eligibility threshold would minimize the shift in total PPS payments away from private urban hospitals with 60 percent to 75 percent combined Medicare and Medicaid patient shares (Table A-4). This group was highlighted in MedPAC's report on urban critical access hospitals (MedPAC 1997).

Much of the aggregate shift in DSH payments to public hospitals under our proposal is due to the inclusion of a greater number of public hospitals in rural areas, which are currently left out of the DSH system. Although major public teaching hospitals tend to have less Medicare business, our analysis suggests that the amount of uncompensated care they provide is large enough to produce a shift in DSH monies from private hospitals (Table A-5). Among non-teaching hospitals, many of which are located in rural areas, the share of Medicare business is virtually the same for public and private hospitals. Moreover, even among non-teaching hospitals, which tend to fare best under our proposal, the share of total Medicare dollars going to public hospitals is considerably less than that going to private hospitals (Table A-6). For example, Medicare's cost share among public non-teaching hospitals is approximately 8 percent, compared with 39 percent among private non-teaching hospitals. Even more striking is the difference between other public and private teaching hospitals—2 percent versus 33 percent, respectively. ■

**TABLE A-2**

**Percentage change in total payments due to recommended disproportionate share policy changes, by threshold and hospital location**

Hospital location	Threshold making 50% eligible	Threshold making 60% eligible
Urban	-1.0	-1.0
Large urban (1 million+ population)	-0.6	-0.8
Other urban	-1.5	-1.3
Rural	6.5	6.5
Sole community	6.7	6.6
Rural referral center	4.0	4.3
Other rural, 50 beds or more	9.8	9.7
Other rural, less than 50 beds	10.0	9.5
Small rural Medicare dependent	6.0	6.2

Source: MedPAC analysis of 1997 data from Medicare cost reports and the American Hospital Association Annual Survey of Hospitals.

**TABLE A-3**

**Percentage change in total payments due to recommended disproportionate share policy changes, by threshold and teaching status**

Teaching status	Threshold making 50% eligible	Threshold making 60% eligible
Academic medical centers	0.2	-0.4
Other major teaching hospitals (not AMCs)	0.0	-0.5

Note: AMC (Academic medical center).

Source: MedPAC analysis of 1997 data from Medicare cost reports and the American Hospital Association Annual Survey of Hospitals.

**TABLE A-4**

**Percentage change in total payments due to recommended disproportionate share policy changes, by threshold and proportion of Medicare and Medicaid patient shares**

Hospitals proportion of Medicare and Medicaid	Threshold making 50% eligible	Threshold making 60% eligible
Public urban: 100+ beds		
60-75% Medicare and Medicaid	0.8	-0.4
75% or more Medicare and Medicaid	5.5	3.1
Private urban: 100+ beds		
60-75% Medicare and Medicaid	-1.2	-1.0
75% or more Medicare and Medicaid	0.7	-0.1

Source: MedPAC analysis of 1997 data from Medicare cost reports and the American Hospital Association Annual Survey of Hospitals.

**TABLE  
A-5****Selected payer cost shares by public/private teaching status****Key components of low-income patient share**

<b>Teaching status</b>	<b>Medicare costs</b>	<b>Uncompensated care costs</b>	<b>Low-income Medicare costs</b>	<b>Medicaid costs</b>	<b>All components of low-income share</b>
Major teaching					
Public	25.0%	12.0%	3.0%	22.0%	39.0%
Private	34.3	5.5	3.2	15.5	24.3
Other teaching					
Public	35.4	8.0	4.4	15.4	28.2
Private	41.5	4.3	3.0	9.4	16.7
Nonteaching					
Public	43.7	5.9	4.3	11.0	21.3
Private	43.8	4.5	3.4	9.1	17.0

Note: "All components" includes uncompensated care costs, low-income Medicare costs, Medicaid costs, and a proxy measure of the costs of other indigent care programs. Data assume a threshold allowing 60 percent of hospitals to be eligible for a disproportionate share payment.

Source: MedPAC analysis of 1997 data from Medicare cost reports and the American Hospital Association Annual Survey of Hospitals.

**TABLE  
A-6****Proportion of total Medicare costs, by public/private teaching status**

<b>Teaching status</b>	<b>Proportion of total Medicare costs</b>
Major teaching	
Public	3.7%
Private	15.3
Other teaching	
Public	2.1
Private	32.9
Nonteaching	
Public	7.5
Private	38.5
Total	100

Source: MedPAC analysis of 1997 data from Medicare cost reports and the American Hospital Association Annual Survey of Hospitals.

---

## **Acronyms and terms**

---

## Acronyms

---

<b>ADL</b>	activity of daily living
<b>AHRQ</b>	Agency for Healthcare Research and Quality
<b>AMA</b>	American Medical Association
<b>AMC</b>	academic medical center
<b>APR-DRG</b>	all patient refined diagnosis related group
<b>ASC</b>	ambulatory surgical center
<b>BBA</b>	Balanced Budget Act of 1997
<b>BBRA</b>	Balanced Budget Refinement Act of 1999
<b>CAH</b>	critical access hospital
<b>CAHPS</b>	Consumer Assessment of Health Plans Study
<b>CAPD</b>	continuous ambulatory peritoneal dialysis
<b>CAT</b>	computerized automated tomography
<b>CBO</b>	Congressional Budget Office
<b>CC</b>	complication and/or comorbidity
<b>CCI</b>	Correct Coding Initiative
<b>CCPC</b>	Correct Coding Policy Committee
<b>CCPD</b>	continuous cycling peritoneal dialysis
<b>CES</b>	Consumer Expenditure Survey
<b>CHIP</b>	Children’s Health Insurance Program
<b>CMI</b>	case-mix index
<b>COTS</b>	commercial off-the-shelf
<b>CPI-U</b>	consumer price index for urban consumers
<b>CPT</b>	Current Procedural Terminology
<b>CVA</b>	cerebrovascular accident
<b>DME</b>	durable medical equipment OR direct medical education
<b>DRG</b>	diagnosis related group
<b>DSH</b>	disproportionate share hospital
<b>E&amp;M</b>	evaluation and management
<b>ESRD</b>	end-stage renal disease
<b>FFS</b>	fee-for-service
<b>FIM</b>	Functional Independence Measure
<b>FIM-FRG</b>	Functional Independence Measure–Functional Related Group
<b>FTE</b>	full-time equivalent
<b>FY</b>	fiscal year
<b>GAO</b>	General Accounting Office
<b>GDP</b>	gross domestic product
<b>GI</b>	gastrointestinal
<b>GME</b>	graduate medical education
<b>HCFA</b>	Health Care Financing Administration
<b>HCPCS</b>	HCFA Common Procedure Coding System
<b>HEDIS</b>	Health Plan Employer Data and Information Set
<b>HHA</b>	home health agency

<b>HHRG</b>	Home Health Resource Group
<b>HMO</b>	health maintenance organization
<b>IME</b>	indirect costs of medical education
<b>IPS</b>	interim payment system
<b>LTC</b>	long-term care
<b>M+C</b>	Medicare+Choice
<b>MCBS</b>	Medicare Current Beneficiary Survey
<b>MCO</b>	managed care organization
<b>MDS</b>	minimum data set
<b>MDS-PAC</b>	minimum data set–post-acute care
<b>MedPAC</b>	Medicare Payment Advisory Commission
<b>MEI</b>	Medicare Economic Index
<b>MRI</b>	magnetic resonance imaging
<b>MSA</b>	medical savings account
<b>NF</b>	nursing facility
<b>OACT</b>	Office of the Actuary (HCFA)
<b>OASIS</b>	Outcome and Assessment Information Set
<b>OBRA</b>	Omnibus Budget Reconciliation Act
<b>OIG</b>	Office of the Inspector General
<b>OPD</b>	outpatient department
<b>PACE</b>	Program of All-Inclusive Care for the Elderly
<b>PEP</b>	partial episode payment
<b>PIP</b>	principal inpatient diagnosis
<b>PIP-DCG</b>	principal inpatient diagnosis–diagnosis cost group
<b>PPO</b>	preferred provider organization
<b>PPRC</b>	Physician Payment Review Commission
<b>PPS</b>	prospective payment system
<b>PRO</b>	peer review organization
<b>ProPAC</b>	Prospective Payment Assessment Commission
<b>PSO</b>	provider sponsored organization
<b>PT</b>	physical therapy
<b>QISMC</b>	Quality Improvement System for Managed Care
<b>RUC</b>	Relative Value Scale Update Committee
<b>RUG-III</b>	Resource Utilization Groups, Version III
<b>RVUs</b>	relative value units
<b>S&amp;TA</b>	scientific and technological advances
<b>SGR</b>	sustainable growth rate
<b>SNF</b>	skilled nursing facility
<b>SSI</b>	Supplemental Security Income
<b>UDSMR</b>	Uniform Data System for Medical Rehabilitation
<b>USRDS</b>	U.S. Renal Data System

## Terms

---

### **adjustments to payment rates**

Payment systems usually include adjustments to the base payment rates designed to allow for differences in providers' circumstances that are expected to affect their costs of furnishing care. Payment rates may be adjusted, for instance, to accommodate differences in local prices for inputs, which may account for more than 50 percent of the observed variation in providers' costs for a given product or service. Other adjustments may be made to reflect unusual circumstances, such as delivery of specialized types of care or atypical characteristics of beneficiaries. (See base payment amount.)

### **base payment amount**

The base payment amount in a payment system is the amount that a purchaser commits to pay providers for a standard unit of service or product furnished to a covered beneficiary. The base payment amount corresponds to a payment system's unit of payment, which may be individual services, bundles of services (such as hospital stays), episodes of care, or specified periods of time. Providers' payment rates for individual services or products are determined by applying two types of adjustments to the base payment amount. One is based on a relative weight designed to measure the expected relative costliness of each distinct service or product, compared with the cost of the average unit. The other type of adjustment is designed to reflect differences in providers' circumstances that are likely to affect their costs of furnishing care. The base payment amount (sometimes called a conversion factor) thus determines the level of the payment rates in the payment system. (See adjustments to payment rates, relative weights.)

### **capitation**

A payment method in which a purchaser pays a health care entity or provider a fixed amount per person, per time period to supply covered health services to beneficiaries during the period. Contracting entities or providers take the risk that the cost of the covered services beneficiaries use may exceed the capitation payment; if costs are less than the capitation amount, they keep the difference. Employers, government programs, or other purchasers may use capitation to pay health plans, or plans may use it to pay providers. (See fee-for-service, Medicare+Choice.)

### **case mix**

The generic term used to describe the mix of services or products furnished by a provider or group of providers, such as physicians, hospitals, nursing homes, or home health agencies. Providers' case mix is usually summarized by measuring the average expected relative costliness of the services or products provided, which is based on two components. One is a service or product classification system—such as the HCFA Common Procedure Coding System; diagnosis related groups; Resource Utilization Groups, version III; or Home Health Resource Groups—used to identify distinct services or products providers may furnish. The second is a set of relative weights representing the expected relative costliness of the services or products in each classification category, compared with the cost of the average service or product. (See case-mix index, classification system, relative weights.)

### **case-mix index**

Measures the average expected relative costliness of the mix of services or

products furnished by a provider or group of providers. The average is calculated by multiplying the number of units supplied in each classification category by the relative weight for the category, adding the results across all categories, and dividing by the total number of units across all categories. (See case mix, classification system, relative weights.)

### **classification system**

Provides the foundation for payment systems by identifying distinct services or products that will be priced separately because they are expected to require different amounts of providers' resources. Each payment system has a classification system that corresponds to the payment system's unit of payment (services, episodes of care, and so on). Examples include the HCFA Common Procedure Coding System used in the physician fee schedule and the diagnosis related groups patient classification system used in the hospital inpatient prospective payment system. (See case mix, case-mix index, relative weights.)

### **cost-based reimbursement**

The method Medicare initially used to pay health care facilities—such as hospitals, skilled nursing facilities, and home health agencies—for services furnished to beneficiaries. Payment was based on providers' costs as reported on annual cost reports, which identified incurred costs by type of service, separated allowable costs reasonably related to the provision of patient care from those attributable to unrelated activities, and distinguished costs related to services furnished to Medicare patients from those incurred for others.

**fee-for-service**

A method of paying health care providers for individual medical services, as opposed to paying them salaries or capitated payments. Payments may be prospectively determined or based on providers' costs or charges. (See capitation.)

**hospital insurance trust fund**

The trust fund finances services covered under Medicare Part A. Its primary source of income is payroll taxes paid by employees and employers. (See supplementary Medical Insurance trust fund.)

**major teaching hospital**

A hospital with an approved graduate medical education program and a ratio of interns and residents to beds of 25 percent or greater.

**market basket index**

A price index designed to measure prices for the typical mix of goods and services providers purchase to produce a specific product or set of products relative to a base year. Generally, these indexes contain three elements: a set of input categories, such as labor, supplies, and purchased services; a set of price proxies representing the price levels for the input categories; and a fixed set of weights (proportions) representing the relative importance of each input category in providers' input expenditures for the base year. The actual or projected values of the price proxies for a year are multiplied by the category weights and summed to obtain the overall market basket index value for the year. The rate of change in input prices can be calculated by comparing index values over time. HCFA computes separate market basket indexes for most facilities; it also calculates a similar measure, called the Medicare Economic Index, for physicians' office practices. (See update.)

**Medicare**

A health insurance program for people who are older than 65, eligible for Social Security disability payments, or who need kidney dialysis or a transplant. (See Medicare Part A, Medicare Part B.)

**Medicare Part A**

Also called hospital insurance. This part of the Medicare program covers the cost of hospital and related post-hospital services, including some care provided by skilled nursing facilities and home health agencies. Eligibility is normally based on prior payment of payroll taxes. Beneficiaries are responsible for an initial hospital deductible per spell of illness and for copayments for some services.

**Medicare Part B**

Also called supplementary medical insurance. This part of the Medicare program covers the cost of physicians' services, outpatient laboratory and X-ray tests, durable medical equipment, outpatient hospital care, some home health care, and certain other services. The voluntary program requires payment of a monthly premium, which covers 25 percent of program costs, with general tax revenues covering the rest. Beneficiaries are responsible for an annual deductible and coinsurance payments for most covered services.

**Medicare+Choice**

A program created by the Balanced Budget Act of 1997 to replace the methods Medicare previously used to pay health maintenance organizations (HMOs). Beneficiaries have the choice to enroll in a Medicare+Choice plan or to remain in the traditional Medicare program. Medicare+Choice plans may include coordinated care plans (HMOs, preferred-provider organizations, or plans offered by provider-sponsored organizations), private fee-for-service plans, or high-deductible plans with medical savings accounts.

**Medigap insurance**

Privately purchased individual or group health insurance policies designed to supplement Medicare coverage. Benefits may include payment of Medicare deductibles and coinsurance, as well as payment for services not covered by Medicare. Medigap insurance policies must conform to 1 of 10 federally standardized benefit packages.

**other teaching hospital**

A hospital with an approved graduate medical education program and a ratio of interns and residents to beds of less than 25 percent.

**payment-to-cost ratio**

A measure that compares providers' payments to their costs. For Medicare, calculated by dividing Medicare payments by Medicare-allowable costs.

**productivity**

Refers to the quantity of resources used to produce a unit of output. Increased productivity implies that an organization is producing more output with the same resources or the same output with less resources.

**prospective payment**

A method of paying health care providers in which payments are based on predetermined rates and are unaffected by providers' incurred costs or posted charges. Examples include Medicare's per-discharge payments for inpatient hospital care and the program's per-service payments for physician services.

**relative weights**

In payment systems, relative weights are used with product classification systems to adjust payment rates to reflect the expected relative costliness of each service or product, compared with the cost of the average service unit. In Medicare's hospital inpatient prospective payment system, hospitals' base payment amounts for cases in each diagnosis related group (DRG) are determined by multiplying their base per discharge payment amounts by the relative weight for the DRG. Relative weights may be based on providers' national average charges or costs for cases in each product category. When charge or cost data are unavailable, weights may be based on judgments by clinicians or other experts, as are the relative values for the professional component of the Medicare physician fee schedule. (See base payment amount, case mix, case-mix index, classification system.)

**risk adjustment**

The process used to adjust plan or provider payments to account for predictable differences in the cost of providing care to beneficiaries. Risk adjustment is based on the empirical relationship between the cost of providing care and beneficiaries' characteristics, including health status, use of services, and demographic characteristics.

**risk score**

A measure of the expected costliness of a beneficiary with specific characteristics, compared with the cost of caring for the average beneficiary. For example, if the average cost of caring for beneficiaries is represented by a risk score of 1, then the expected costliness of caring for a beneficiary with a risk score of 1.2 is 20 percent higher. (See relative weight, risk adjustment.)

**risk selection**

Any situation in which health plans differ in the average health risk associated with their enrollees because of enrollment choices made by the plans or enrollees. When risk selection occurs, health plans' expected costs differ because of underlying differences in their enrolled populations.

**standardization**

A process of adjusting charges or costs for particular services or bundles of services to remove differences that result from geographic variation in price levels, demographic characteristics, beneficiary health risk, and other factors. Standardization is intended to make charges or costs more comparable among providers, plans, and geographic areas. (See adjustments to payments.)

**supplementary medical insurance trust fund**

Finances services covered under Medicare Part B. This trust fund is financed from general revenues and premiums paid by beneficiaries. The premium rate is derived annually based on the projected costs of the program for the coming year. (See hospital insurance trust fund.)

**update**

A periodic adjustment (usually annual) designed to raise or lower a base payment amount to account for the effects of anticipated changes in factors that affect the costs that efficient providers would be expected to incur in providing care. (See market basket index.)

**uncompensated care**

Care provided by hospitals or other providers that is not paid for directly (by the patient or by a government or private insurance program). It includes charity care, which is furnished without the expectation of payment, and bad debts, for which the provider has made an unsuccessful effort to collect payment due.

---

## **More about MedPAC**

---

## Commission members

---

**Gail R. Wilensky, Ph.D., chair**

*Project HOPE  
Center for Health Affairs  
Bethesda, MD*

**Joseph P. Newhouse, Ph.D., vice chair**

*Harvard University  
Boston, MA*

*Term expires April 2000*

---

**Peter Kemper, Ph.D.**

*Center for Studying Health System  
Change  
Washington, DC*

**Judith Lave, Ph.D.**

*University of Pittsburgh  
Pittsburgh, PA*

**D. Ted Lewers, M.D.**

*Private practice of medicine  
Easton, MD*

**Hugh W. Long, Ph.D., J.D.**

*Tulane Medical Center  
New Orleans, LA*

**William A. MacBain**

*MacBain & MacBain, LLC  
Ithaca, NY*

**Gerald M. Shea**

*AFL-CIO  
Washington, DC*

*Term expires April 2001*

---

**Spencer Johnson**

*Michigan Health and Hospital  
Association  
Lansing, MI*

**Woodrow A. Myers Jr., M.D.**

*Ford Motor Company  
Dearborn, MI*

**Joseph P. Newhouse, Ph.D.**

**Alice Rosenblatt, F.S.A,  
M.A.A.A.**

*WellPoint Health Networks  
Thousand Oaks, CA*

**John W. Rowe, M.D.**

*Mount Sinai School of Medicine  
Mount Sinai NYU Health  
New York, NY*

**Gail R. Wilensky, Ph.D.**

*Term expires April 2002*

---

**Beatrice S. Braun, M.D.**

*AARP, Board of Directors  
Spring Hill, FL*

**Floyd D. Loop, M.D.**

*The Cleveland Clinic Foundation  
Cleveland, OH*

**Janet G. Newport**

*PacifiCare Health Systems  
Santa Ana, CA*

**Carol Raphael**

*Visiting Nurse Service of New York  
New York, NY*

**Mary K. Wakefield, Ph.D.**

*College of Nursing and Health Science  
George Mason University  
Fairfax, VA*

## Commissioners' biographies

---

**Beatrice S. Braun, M.D.,** is a member of the board of directors of AARP. Dr. Braun is a member of the State Advisory Council for the Florida Department of Elder Affairs and serves on the board of directors for the Mid-Florida Area Agency on Aging. Dr. Braun founded and, until her retirement in 1989, directed a day treatment program at St. Vincent's Hospital in Harrison, New York, for people with severe and persistent mental illness. She is a past president of the American Association for Partial Hospitalization. She also had a private practice in psychiatry for 16 years and was named a fellow of the American Psychiatric Association. Before her psychiatric specialization, Dr. Braun served for 17 years as a family physician and missionary in South Korea.

**Spencer Johnson** is president of the Michigan Health and Hospital Association, which is the principal statewide advocate for hospitals, health systems, and other health care providers committed to improving community health status. Before assuming this position in early 1985, Mr. Johnson was executive vice president of the Hospital Association of New York State. Before that, he was involved in the development of federal health policy and legislation as associate director of the Domestic Council at the White House during the Ford Administration and as a professional staff member of the U.S. Senate and the House of Representatives. He has served on the Prospective Payment Assessment Commission and is a board member of both Blue Cross Blue Shield of Michigan and the MHA Insurance Company. Mr. Johnson holds a master's degree in public administration from Cornell University and a bachelor's degree in journalism from St. Bonaventure University.

**Peter Kemper, Ph.D.,** is vice president of the Center for Studying Health System Change. He is principal investigator of the center's Community Tracking Study, a major national study of change in the health care system and its effect on health care delivery, access, cost, and quality. Before that, he was director of the Division of Long-Term Care Studies at the Agency for Health Care Policy and Research, where he headed studies of nursing home and home health care. Dr. Kemper has published widely on long-term care of the elderly, including financing of care, home care for those with chronic care needs, and nursing home use. Currently, he studies the effects of various types of managed care on patient access, service use, and perceived quality. Earlier in his career, he was director of the Madison Office of Mathematica Policy Research and an assistant professor at Swarthmore College. Dr. Kemper received a B.A. in mathematics from Oberlin College and a Ph.D. in economics from Yale University.

**Judith Lave, Ph.D.,** is professor of health economics at the Graduate School of Public Health and codirector of the Center for Research on Health Care at the University of Pittsburgh. She holds secondary appointments in the Katz Graduate School of Business and in the departments of economics and psychiatry. Previously, she served on the Prospective Payment Assessment Commission. At the U.S. Department of Health and Human Services, she was the director of the Division of Economic and Quantitative Analysis in the Office of the Deputy Assistant Secretary and director of the Office of Research in the Health Care Financing Administration. Dr. Lave is currently on the editorial boards of *Health Affairs* and the *Journal of Health Politics, Policy, and Law* and a member of the Institute of Medicine and the National Academy of Social Insurance. She is past president of the Association for Health Services Research and the Foundation for Health Services Research. Dr. Lave chaired the technical panel on health and was a member of the expert panel on income and health care for the Advisory Council on Social Security. She served on the editorial board of the Health Administration Press. She received a B.A. and an honorary LL.D. from Queen's University, Canada, and a Ph.D. in economics from Harvard University. She serves on the technical advisory group of the Pennsylvania Health Care Cost Containment Commission.

**D. Ted Lewers, M.D.**, a nephrologist and internist, is on the staff at the Memorial Hospital in Easton, Maryland. Chair of the Board of Trustees, American Medical Association, Dr. Lewers also is chair of the board at the Medical Mutual Liability Insurance Company of Maryland and chair of the board of Health Enhancement Center, Inc. Previously, he served on the Physician Payment Review Commission. Long active in organized medicine, Dr. Lewers served as president of the Medical and Chirurgical Faculty of Maryland from 1985 to 1986 and as vice chair of the American Medical Association's Relative Value Scale Update Committee. Dr. Lewers received a B.A. from the University of Maryland and a medical degree from the University of Maryland School of Medicine. He completed an internship at the University of Maryland, Baltimore, a residency at Maryland General Hospital, and a fellowship in nephrology at Georgetown University Hospital.

**Hugh W. Long, Ph.D., J.D.**, is professor of health systems management at the Tulane University School of Public Health and Tropical Medicine in New Orleans. He also holds appointments at Tulane's School of Law and its Freeman School of Business and is a member of Tulane's graduate faculty. Dr. Long is the founder and faculty director of Tulane's master of medical management degree program for physicians. Previously, he served on the Prospective Payment Assessment Commission. He has also taught at Yale, Stanford, San Jose State, and Ohio State universities. Dr. Long has served as an ad hoc adviser on health care financing to the Committee on Ways and Means of the U.S. House of Representatives and to the Committee on Finance of the U.S. Senate and has testified before these committees. He currently serves as the chairman of the Medicare Geographic Classification Review Board. He is the author of numerous articles on health care financing and management and is a member of the faculty of the American College of Physician Executives. Dr. Long received a B.A. from Ohio State University, an M.B.A. and a Ph.D. in business administration and finance from Stanford University, and a J.D. from Tulane University.

**Floyd D. Loop, M.D.**, has served since 1989 as chief executive officer and chairman of the Board of Governors of The Cleveland Clinic Foundation. In the past 10 years, the Cleveland Clinic has developed a regional health care delivery system of clinics and acquired hospitals. Dr. Loop has practiced thoracic and cardiovascular surgery for 30 years and from 1975 to 1989 served as chairman of this department at the Cleveland Clinic. As a practicing surgeon, Dr. Loop and his colleagues have made numerous contributions to cardiac surgery, including extensive writings on internal thoracic artery grafting, reoperations, myocardial protection, and long-term results. He is a former editor of *Seminars in Thoracic and Cardiovascular Surgery* and has served on the editorial boards of 15 specialty journals in surgery and cardiology. Dr. Loop is the author of more than 300 articles on surgery. He chaired the Residency Review Committee for Thoracic Surgery and has been president of the American Association for Thoracic Surgery. He received a medical degree from George Washington University and completed surgical residencies at George Washington University and the Cleveland Clinic.

**William A. MacBain** is a founding principal of MacBain & MacBain, LLC, a management consulting firm that specializes in managed care. He was formerly senior vice president of health plan operations for Geisinger Health System and executive director of Penn State Geisinger Health Plan, Inc. (New York). Before joining Geisinger in 1988, Mr. MacBain was chief operating officer of HMO of Western Pennsylvania, a health plan and clinic network based on the Miners Clinic in New Kensington, Pennsylvania. Before that, he held senior operations and finance posts with health plans in Tulsa, Oklahoma, and Nassau County, New York. He began his career with Health Services Association, a primarily rural prepaid group practice plan and family health center program north of Syracuse, New York. Mr. MacBain has served as a board member of the American Association of Health Plans, the Group Health Association of America, and the Managed Care Association of Pennsylvania. He chaired the

Pennsylvania association for several years. He is also a past commissioner of the Prospective Payment Assessment Commission. He has a B.A. and a master's degree in hospital and health services administration, both from Cornell University.

**Woodrow A. Myers Jr., M.D.,** is director of health care management for the Ford Motor Company, where he is responsible for health benefits for active and retired employees and their dependents, occupational health and safety services, and disability and workers' compensation programs. Previously, he was senior vice president and corporate medical director of The Associated Group (now Anthem Blue Cross Blue Shield). He was New York City Health Commissioner and served as Indiana State Health Commissioner and secretary to the Indiana State Board of Health. Before that, Dr. Myers was associate director of the medical-surgical intensive care unit and chairman of the quality assurance program at the San Francisco General Hospital and an assistant professor of medicine at the University of California, San Francisco. A past president of the Association of State and Territorial Health Officials and former adviser to the U.S. Senate Committee on Labor and Human Resources, Dr. Myers has taught at Cornell University; Indiana University; and University of California, San Francisco. He is on the boards of Harvard University and UCSF/Stanford University Health Systems. He is also a fellow of the American College of Physician Executives; a member of the Institute of Medicine; and a master, American College of Physicians. Dr. Myers received a B.S. from Stanford University, a medical degree from Harvard Medical School, and an M.B.A. from Stanford University Graduate School of Business.

**Joseph P. Newhouse, Ph.D.,** is vice chair of the Commission. He is the John D. MacArthur Professor of Health Policy and Management at Harvard University and director of Harvard's Division of Health Policy Research and Education. At Harvard since 1988, Dr. Newhouse was previously a senior corporate fellow and head of the economics department at RAND. He has conducted research in health care financing, economics, and policy, and was the principal investigator for the RAND Health Insurance Experiment. Recipient of several professional awards, he is a member of the Institute of Medicine, a former chair of the Prospective Payment Assessment Commission, and a former member of the Physician Payment Review Commission. He is also a past president of the Association for Health Services Research and has been elected to the American Academy of Arts and Sciences. Dr. Newhouse is editor of the *Journal of Health Economics*. He received a B.A. from Harvard College and a Ph.D. in economics from Harvard University.

**Janet G. Newport** is corporate vice president of regulatory affairs at PacifiCare Health Systems, Inc., the nation's largest coordinated care Medicare contractor. Her responsibilities include monitoring and supporting internal operational compliance, policy development, and regulatory interpretation. She also acts as the liaison with key regulatory agencies. Ms. Newport serves on several technical and advisory committees for the American Association of Health Plans and is a representative on the Health Care Financing Administration's (HCFA) Medicare Council. In addition, Ms. Newport has served as an industry representative on HCFA technical committees and is a former chair of the American Managed Care and Review Association's Medicare Task Force. She has more than 20 years of public affairs experience, including 10 years directing the Washington, D.C., office of another Medicare risk contractor. Ms. Newport received a B.A. from American University.

**Carol Raphael** is president and chief executive officer of the Visiting Nurse Service (VNS) of New York, the largest voluntary home health care organization in the United States. Under Ms. Raphael's leadership, VNS created the Medicare Community Nursing Organization and VNS Choice, a New York State Medicaid Managed Long-Term Care Program. Ms. Raphael also developed the VNS Center for Home Care Policy and Research, which conducts policy-relevant research focusing on the management, cost,

quality, and outcomes of home- and community-based services. Before joining VNS, Ms. Raphael worked for more than nine years at the New York City Human Resources Administration, leaving as executive deputy commissioner of the Income and Medical Assistance Administration. Ms. Raphael has served on several Robert Wood Johnson Foundation advisory committees and New York state panels, including the New York State Hospital Review and Planning Council.

**Alice Rosenblatt, F.S.A., M.A.A.A.,** is senior vice president of Merger and Acquisition Integration at WellPoint Health Networks. She previously served as chief actuary and was responsible for corporate actuarial and strategic planning. Before joining WellPoint in 1996, she was a principal at Coopers & Lybrand LLP, where she consulted with insurers, health plans, providers, and employers. She is a former senior vice president and chief actuary of Blue Cross Blue Shield of Massachusetts and Blue Cross of California. Other positions include work for The New England and William M. Mercer, Inc. Ms. Rosenblatt has served on the Board of Governors of the Society of Actuaries and the American Academy of Actuaries. She previously chaired the academy's federal health committee and work group on risk adjustment. Ms. Rosenblatt has testified on risk adjustment before subcommittees of the Committee on Ways and Means and the Committee on Commerce of the U.S. House of Representatives. She has a B.S. and an M.A. in mathematics from City College of New York and the City University of New York, respectively.

**John W. Rowe, M.D.,** is president and chief executive officer of Mount Sinai NYU Health. Prior to the Mount Sinai-NYU Medical Center merger, Dr. Rowe was president of the Mount Sinai Hospital and the Mount Sinai School of Medicine in New York City. He serves as a professor of medicine and geriatrics at the Mount Sinai School of Medicine. Before joining Mount Sinai in 1988, Dr. Rowe was a professor of medicine and the founding director of the Division on Aging at Harvard Medical School, and chief of gerontology at Boston's Beth Israel Hospital. He has authored more than 200 scientific publications, mostly on the physiology of the aging process, and a leading textbook on geriatric medicine. Dr. Rowe has received many honors and awards for his research and health policy efforts on care of the elderly. He was director of the MacArthur Foundation Research Network on Successful Aging and is co-author, with Robert Kahn, Ph.D., of *Successful Aging* (Pantheon 1998). He served on the Board of Governors of the American Board of Internal Medicine, as president of the Gerontological Society of America, and is a member of the Institute of Medicine.

**Gerald M. Shea** is currently assistant to the president for Government Affairs at the AFL-CIO. Mr. Shea was appointed to this position by John J. Sweeney when Mr. Sweeney was elected president of the AFL-CIO in October 1995. Mr. Shea held various positions at the AFL-CIO from August 1993 through October 1995, serving first as the director of the policy office with responsibility for health care and pensions and then in several executive staff positions. Before joining the AFL-CIO, Mr. Shea spent 21 years with the Service Employees International Union as an organizer and local union official in Massachusetts and later on the national union's staff. Mr. Shea was a member of the 1994–1996 Advisory Council on Social Security and also of the Social Security Advisory Board. He holds a seat on the Joint Commission on the Accreditation of Health Care Organizations, representing union and consumer interests. He also is a founding member of the Foundation for Accountability, a national coalition of organizations that work to help consumers make health care choices based on quality. Mr. Shea is a native of Massachusetts and a graduate of Boston College.

**Mary K. Wakefield, PhD.,** has served since 1996 as professor and director of the center for Health Policy, Research, and Ethics at George Mason University, working on policy analysis, research, and educational initiatives. Dr. Wakefield held administrative and legislative staff positions at the U.S. Senate before assuming her current position.

She has served on many public and private health-related advisory boards. From 1997 through 1998, she was on President Clinton's Advisory Commission on Consumer Protection and Quality in the Health Care Industry. In September 1998, Dr. Wakefield was appointed to the Institute of Medicine's Committee on Quality Health Care in America. She was a Kodak Fellow in the Program for Senior Managers in Government at the John F. Kennedy School of Government, Harvard University, and is a fellow in the American Academy of Nursing. Dr. Wakefield received her B.S. in nursing from the University of Mary, Bismarck, North Dakota, and her M.S. and Ph.D. from the University of Texas at Austin.

**Gail R. Wilensky, Ph.D.,** is chair of the Commission. She is the John M. Olin Senior Fellow at Project HOPE, where she analyzes and develops policies relating to health care reform and ongoing changes in the medical marketplace. She also frequently advises members of the Congress and others on the policies and politics of health care reform. Former chair of the Physician Payment Review Commission, Dr. Wilensky has held several posts in the executive branch, most recently as deputy assistant to the President for policy development during the Bush Administration and, before that, as administrator of the Health Care Financing Administration. Recipient of numerous professional awards, she is a member of the Institute of Medicine, a trustee of the Combined Benefits Fund of the United Mine Workers of America, and a governor for the Research Triangle Institute. In addition to serving on many other professional committees and corporate boards, Dr. Wilensky is a well-known speaker who has published widely on health policy, economics, and financing. She received a B.A. in psychology and a Ph.D. in economics from the University of Michigan.

## Commission staff

---

**Murray N. Ross, Ph.D.**

*Executive director*

**Lu Zawistowich, Sc.D.**

*Deputy director*

**Jennifer Jenson, M.P.H., M.P.P.**

*Special assistant to the executive director*

**Helaine I. Fingold, J.D.**

*General counsel*

*Research directors*

---

Jack Ashby, M.H.A.  
Elizabeth Docteur, M.S.  
Scott Harrison, Ph.D.  
Kevin J. Hayes, Ph.D.  
Sally Kaplan, Ph.D.  
Julian H. Pettengill, M.A.

*Analysts*

---

Matthew Barry, M.P.A.  
David V. Glass, M.S.  
Janet C. Goldberg, M.P.H.  
Timothy F. Greene, M.B.A.  
Jesse Kerns, M.P.P.  
Craig K. Lisk, M.S.  
Mary B. Mazanec, M.D., J.D.  
Anne Mutti, M.P.A.  
Susan Philip, M.P.P.  
Nancy Ray, M.S.  
Jennifer N. Thompson, B.A.  
Deborah Walter, M.P.A.  
Susanne Weinrauch, M.D., M.P.A.  
Chantal Worzala, Ph.D.  
Daniel Zabinski, Ph.D.

*Administrative support*

---

Reda Broadnax, B.S.  
Wylene Carlyle  
Diane E. Ellison  
Plinie (Ann) Johnson  
Cheron McCrae  
Alexander Roginsky  
Cynthia Wilson

