

CHAPTER

6

**Prospective payment for
post-acute care: current issues
and long-term agenda**

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

6A The Secretary should conduct an empirical study to assess the extent of substitution among post-acute care settings.

***YES: 14 • NO: 0 • NOT VOTING: 0 • ABSENT: 2**

6B While implementing the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000 provision to develop patient assessment instruments with comparable common data elements, the Secretary should minimize reporting burden and unnecessary complexity while assuring that only necessary data are collected for payment and quality monitoring.

YES: 14 • NO: 0 • NOT VOTING: 0 • ABSENT: 2

6C The Secretary should develop for potential implementation a patient classification system that predicts costs within and across post-acute settings.

YES: 14 • NO: 0 • NOT VOTING: 0 • ABSENT: 2

6D The Secretary should conduct demonstrations to test the feasibility of including a larger scope of services in the payment bundle.

YES: 14 • NO: 0 • NOT VOTING: 0 • ABSENT: 2

6E The Secretary should develop a new classification system for skilled nursing facility care while continuing to monitor access and quality.

YES: 15 • NO: 0 • NOT VOTING: 0 • ABSENT: 1

6F Until a core set of common data elements for post-acute care is developed, the Secretary should require the Functional Independence Measure as the patient assessment tool for the inpatient rehabilitation prospective payment system.

YES: 14 • NO: 0 • NOT VOTING: 0 • ABSENT: 2

6G The Secretary should require a high-cost outlier policy of 5 percent for the inpatient rehabilitation payment system and study whether a different percentage policy is needed.

YES: 14 • NO: 0 • NOT VOTING: 0 • ABSENT: 2

6H The Secretary should reexamine the disproportionate share adjustment for the inpatient rehabilitation prospective payment system.

YES: 14 • NO: 0 • NOT VOTING: 0 • ABSENT: 2

6I In monitoring the performance of the payment system, the Secretary should pay particular attention to the use of significant change in condition payment adjustments and payments for patients with wound care needs.

YES: 14 • NO: 0 • NOT VOTING: 0 • ABSENT: 2

Prospective payment for post-acute care: current issues and long-term agenda

Post-acute care comprises care provided in skilled nursing and rehabilitation facilities, long-term hospitals, and in the home. In response to rapid growth in spending for this type of care during the 1990s, the Congress directed the Health Care Financing Administration to replace cost-based payment methods with new prospective payment systems for all four settings. However, because these new systems focus on the settings in which care is provided rather than the care itself, they raise concerns about whether Medicare's payment policies are appropriate. In this chapter, we recommend the Secretary assess the degree of similarity in services and patients in different settings and test alternative payment systems that could account for such overlap. These steps will take time. Accordingly, we also recommend steps in the short run to improve payment so that Medicare beneficiaries' access to care will be maintained.

In this chapter

- The nature of post-acute care
 - Designing prospective payment systems across post-acute care
 - Addressing more immediate issues of correct payment within settings
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Post-acute care, which generally follows an acute hospitalization, is provided in four settings—skilled nursing facilities (SNFs), rehabilitation facilities, long-term hospitals, and the home. In paying for post-acute care, Medicare’s intent is to ensure that beneficiaries obtain services in the most clinically appropriate setting based on their needs and circumstances.

Medicare beneficiaries use post-acute care frequently: in 1997, one-quarter of those discharged from acute care hospitals used post-acute care providers within one day of leaving the hospital (Table 6-1). SNFs were used most often, accounting for 13 percent of acute hospital discharges and more than half of all discharges to post-acute care providers. Home health providers accounted for 8 percent of acute discharges, and rehabilitation facilities for about 3 percent.¹

This health care sector has grown significantly in the past two decades, particularly in the 1990s. Policymakers expected the use of post-acute care to grow when the prospective payment system (PPS) for inpatient hospital services was implemented in 1983. Indeed, they viewed such growth as critical to the effective functioning of the new payment system because the inpatient PPS created strong incentives for hospitals to discharge beneficiaries who did not need expensive acute care into lower-intensity, less expensive settings. Following major changes in coverage for SNF and home health care, however, use of post-acute care grew much more rapidly than expected; between 1988 and 1994, Medicare spending for post-acute services increased at an average annual rate of 34 percent.²

This unexpected growth reflected Medicare’s use of cost-based reimbursement for post-acute care, which

TABLE 6-1 Post-acute provider use within one day of discharge from an acute care hospital, by type of provider, 1997

| Type of provider | Number of discharges using post-acute care | Percent of hospital discharges | Percent of post-acute admissions |
|--------------------------|--|--------------------------------|----------------------------------|
| Total | 2,476,412** | 25.3% | 100% |
| Skilled nursing facility | 1,320,701 | 13.5 | 53.3 |
| Home health agency | 799,893 | 8.2 | 32.3 |
| Rehabilitation facility | 278,073 | 2.9 | 11.2 |
| Psychiatric facility* | 43,794 | 0.4 | 1.8 |
| Long-term hospital | 33,951 | 0.3 | 1.4 |

Notes: First postacute care stays that began in 1997 and ended in 1997 or 1998 are included in the calculations.
 * Psychiatric facilities are included because they are sometimes part of a post-acute care episode.
 ** Cases where the patient died in the hospital or was transferred to another acute-care hospital are excluded from the calculations.

Source: MedPAC analysis of 1997 MedPAR inpatient and post-acute care claims from the Health Care Financing Administration.

gave providers of those services no incentive to do so efficiently. With limited constraints on payments, post-acute care providers greatly expanded their capacity to care for Medicare beneficiaries. For example, SNFs increased their capacity to provide ancillary services such as physical, occupational, and speech therapy (GAO 1999b). Home health providers, reimbursed for unlimited visits, used new technology and more highly trained personnel to provide care to patients in their homes that previously had been furnished in institutional settings (Manard et al. 1995).

In response to the rapid growth in post-acute care spending, the Congress directed the Health Care Financing Administration (HCFA) to replace cost-based payment methods with new prospective payment systems for all four post-acute settings. The skilled nursing facility PPS has been in place since 1998, and the PPS for home

health services has been in place since October 2000.³ The prospective payment systems for services in inpatient rehabilitation facilities and long-term hospitals are scheduled for implementation in 2001 and 2002, respectively.

These new systems focus on the settings in which care is provided, rather than the care and the patients who receive it. As a result, Medicare may pay quite differently for the same care when it is furnished to similar patients in different settings, raising concerns that payment policy rather than clinical decisions may drive providers’ decisions. In this chapter, we examine the nature of post-acute care and recommend steps that could enable Medicare to implement such policies. We also examine problems with the new prospective payment systems that have emerged since their implementation and recommend remedies.

1 Beneficiaries referred from the community without a hospitalization and those receiving home health services before they were hospitalized are not included in this analysis, but represent a substantial proportion of home health users.
 2 Major policies affecting SNF coverage and resulting in increased use were the Omnibus Budget Reconciliation Act of 1987; the Medicare Catastrophic Coverage Act, passed in 1988 and repealed in 1989; and HCFA’s clarification of coverage guidelines in 1988. Change in home health coverage guidelines in response to Duggan v. Bowen, a 1988 decision from the District of Columbia district court, allowed more beneficiaries to qualify for more services.
 3 The Balanced Budget Act of 1997 (BBA) required two new payment systems for home health services; the PPS, and an interim system, while the PPS was developed.

The nature of post-acute care

In theory, post-acute care should respond to patients' clinical needs irrespective of setting. However, Medicare's current policies are specific to the setting, not to the care. Because we lack clear guidelines as to which setting may be appropriate for any given patient and because different settings may substitute for one another in providing similar care, the possibility arises that placement decisions may be driven (now, or in the future) by financial, rather than clinical considerations. If comparable care were provided in two settings with different prices, placement in the more costly setting would increase Medicare spending. Further, substitution driven by financial incentives also may reduce quality of care. To assess the extent of substitution—and to aid in developing policies to avoid any negative consequences—new research is needed.

Variation in Medicare policy across settings

Medicare's current policies for post-acute care—coverage rules and eligibility criteria, conditions of participation, and payment—vary by setting, making it difficult to assess differences among patients and the care they receive in different settings.

Several examples illustrate differences among post-acute settings in coverage rules and eligibility criteria. Medicare coverage for SNF care (but not home health care) requires a three-day hospitalization in the previous month to trigger Medicare coverage for SNF care. To be admitted to a rehabilitation facility (but not to a skilled nursing facility, which may offer rehabilitation services), patients must be able to sustain three hours of daily therapy—physical, occupational, and/or speech—and have the potential for meeting pre-identified goals. To obtain home health services, patients must be homebound and need intermittent or part-time skilled care.

Post-acute care providers must also meet different conditions of participation. For example, physicians must be integrally involved in care provided in rehabilitation facilities and long-term hospitals, but are required to visit a SNF patient only every 30 days for the first 60 days.

Requirements for physician involvement in home health care are even less stringent. The degree of physician involvement in furnishing care is one of several factors that may determine providers' responses to financial incentives (see Chapter 1).

Finally, Medicare's payment policies are different in each setting. Medicare pays on a per diem basis for care in skilled nursing facilities, but plans to pay on a per discharge basis for inpatient rehabilitation services. Medicare pays for home care on the basis of a 60-day episode, but allows for multiple episodes.

Placement decisions

Although experts agree that numerous factors—including clinical needs, functional status, patient and family preferences, family and community support, and the capacity of local resources—play roles in defining which post-acute setting would best serve a patient, there is no consensus on how such factors are appropriately weighted. Therefore, at present, post-acute placement decisions are made in the absence of standardized guidelines (below).

Overlap in services across settings

While some observers have concluded that there is some degree of overlap in the care provided among these settings, empirical evidence that settings substitute for one another is weak. One study (Neu et al. 1988) found SNF and home health were substitutes, but that SNF and

Feasibility of developing clinically based indicators of access to skilled nursing facility care

As part of MedPAC's ongoing effort to evaluate the impact of prospective payment on beneficiaries' access to post-acute care, we contracted with Mathematica Policy Research, Inc. (MPR) to study the feasibility of creating indicators of access to needed skilled nursing facility (SNF) care based on clinical evidence of professional consensus, which could also be based on routinely collected administrative data. MPR concluded that it would be difficult to create clinical indicators from existing administrative data because of critical limitations in both data and available standards of care (Schmitz et al. 2001).

MPR considered three types of indicators—appropriate placement, receipt of clinically necessary services, and outcomes sensitive to receipt of needed care—and found barriers to developing each. Barriers

to measuring appropriate SNF placement included a lack of standards or guidelines for SNF admission and a lack of administrative data on many of the relevant clinical and nonclinical hospital patient characteristics to assess conformance. Although clinical guidelines exist for treatment of nine types of patients with conditions commonly treated in SNFs (and which represent most admissions), existing guidelines fail to recommend a particular setting in which care should be furnished, and available data identify only some of the services prescribed by those guidelines. The Minimum Data Set (MDS) provides information that can be used to evaluate some SNF patient outcomes, but in many cases those outcomes are not adjusted for risk and in no circumstances are they linked to the provision of specific services or lack thereof. ■

rehabilitation facilities were not; another study (Steiner and Neu 1992) found the opposite. A third study found that the potential for substitution varied by diagnosis, with little potential for substitution among stroke patients but more potential for congestive heart failure patients (Gage 1999). Other analyses using functional status data provided mixed evidence of substitution, which sometimes varied by diagnosis (Kane et al. 2000, Keith et al. 1995, Kramer et al. 1997b, Kramer et al. 2000b, Manton et al. 1994). For example, Kramer (1997b) found that SNFs substitute for rehabilitation facilities for hip fracture patients, but not for stroke patients.

A MedPAC-sponsored study of 7,500 post-acute episodes from Medicare Current Beneficiary Survey (MCBS) cost and use files for 1992-1997 determined that beneficiaries using home health as their only post-acute care had substantially different characteristics, compared with individuals receiving all or part of their post-acute care from skilled nursing facilities (Hogan 2000).

Beneficiaries using only skilled nursing facility care were more severely ill than those using home health care (either by itself or following SNF care). Patients with SNF care as their only post-acute care were nearly twice as likely to be readmitted to a hospital or to a hospice and were three times more likely to die, compared with individuals using either a combination of SNF and home health care or home health only. Receiving home health services after a SNF stay appears to indicate recovery: 81 percent of these patients eventually recovered and were discharged.

Some of these studies lack good ways of describing patient characteristics, most are old, and none are based on data following the implementation of prospective payment for skilled nursing facilities and home health care. However, even with limited and contradictory evidence, researchers and policymakers hypothesize that substitution exists to some degree.

Because prospective payment introduces new incentives for substitution, it is crucial that new research be undertaken.

RECOMMENDATION 6A

The Secretary should conduct an empirical study to assess the extent of substitution among post-acute care settings.

An empirical study is needed to assess the extent to which overlap of patients and services occurs across settings under the new post-acute payment systems. Such a study could inform policy decisions about the need for consistency of Medicare policies across various sites of care. HCFA should consider studying patients about to be discharged from acute care hospitals to determine whether they plausibly could go to more than one post-acute destination, given their clinical needs. Researchers should also consider non-clinical factors that influence discharge destination, such as patient and family preferences, availability of informal caregivers, and provider availability.

Designing prospective payment systems across post-acute care

Medicare seeks to ensure that beneficiaries have access to post-acute care in clinically appropriate settings without imposing unnecessary financial burdens on them or on the program. Ultimately, this means that Medicare's payment policies should focus on the patient, not on the setting. This section examines steps toward a patient-focused system. The next section examines improving the current system.

The difficulty of designing prospective payment systems for post-acute care

At the heart of a PPS is a unit of payment, which describes the individual service or set of services that Medicare pays providers to furnish, and a classification

system, which categorizes cases according to clinical characteristics and resource needs. Specifying an appropriate unit of payment and establishing an effective classification system require understanding the patient care product. However, the variation in patients within and across post-acute care settings means that the product varies as well, in terms of duration and intensity. To gain a better understanding of the post-acute care product, we need better information about who is being treated in the different settings.

For inpatient rehabilitation facilities, the product—therapies during an inpatient stay to maximize function following a debilitating event—is relatively well defined, but the products for the other settings are not. SNFs, for example, may have patients who may require mainly rehabilitation services while others need intensive nursing, and a minority of patients may need both types of services (Fries et al. 2000, White et al. 1998). In addition, some patients are admitted to a SNF to recuperate after a hospitalization before returning home, while others may have lived in the nursing home before hospitalization and will return to being long-term care recipients after they no longer qualify for skilled care.⁴ In home health, some patients need short-term nursing or rehabilitation while recuperating from a hospitalization; others need longer-term nursing and supportive services. The long-term hospital product is even less known because these facilities make up a heterogeneous group of providers that furnishes a wide range of intensive services, including trauma and cancer treatment, respiratory therapy for ventilator-dependent patients, pain and wound management, and comprehensive rehabilitation (MedPAC 1999).

Medicare needs a core set of patient assessment data elements

The patient assessment instruments now used in skilled nursing facilities and home health agencies differ significantly in

4 Some patients admitted to a SNF with the expectation that they will be discharged home actually never leave the nursing home. These individuals and those who were hospitalized from the nursing home and return to long-term care after their SNF stay are estimated to make up about 30 percent of the total population of SNF patients (Kramer et al. 1997b)

terms of the aspects of patient status assessed, rating scales and assessment periods used, and specific items included. Even items designed to measure an aspect of common interest have key differences that diminish their comparability.

In past reports, MedPAC has recommended the development of a common core set of patient assessment data elements that can be meaningfully applied across post-acute care settings (MedPAC 1999, MedPAC 2000). Establishing this set which could be augmented for particular subsets of patients or post-acute care settings as appropriate, would increase the ability to assess differences and similarities of patients, service use, and quality of care across settings. It could also facilitate efforts to compare outcomes of patients treated in different settings and enable improvements in systems for payment and quality monitoring.

The Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000 (BIPA) instructs the Secretary to report to the Congress by January 1, 2005 on the development of instruments to assess the health and functional status of beneficiaries using post-acute care and other specified services.⁵ The Secretary is also required to make recommendations on the use of patient assessment instruments for payment purposes. In developing the instruments, the Secretary is to consult with MedPAC, the Agency for Healthcare Research and Quality, and qualified provider organizations.

RECOMMENDATION 6B

While implementing the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000 provision to develop patient assessment instruments with comparable common data elements, the Secretary should minimize reporting burden and unnecessary complexity while assuring that only necessary data are collected for payment and quality monitoring.

The assessment instruments required by the BIPA are to have readily comparable, statistically compatible, common data elements and include only those elements necessary to meet program objectives. The legislation specifies that the standard instruments developed are to supersede the assessment tools now required.

MedPAC believes this mandate presents the Secretary with an opportunity to build on the strengths of existing patient assessment instruments while addressing their shortcomings. In developing instruments to meet the BIPA mandate, the Secretary should strive for brevity and simplicity. The length and complexity of instruments currently in use may compromise the accuracy of the data collected and pose an undue burden in that not all items collected are currently used in program administration. For example, the MDS, which was developed to guide care planning for nursing home residents and is now used in SNFs, has more than 350 items.

MedPAC has concerns about the suitability of the Minimum Data Set for Post-Acute Care (MDS-PAC) to serve as a basis for developing the patient assessment instruments for post-acute care required under the BIPA. The MDS-PAC was developed by HCFA to be applicable across post-acute settings for payment and quality monitoring purposes. In past reports, we commented favorably on the development of the MDS-PAC because of the Commission's strong belief in the need for a more coordinated approach to patient assessment across post-acute settings (MedPAC 1999). However, we are concerned that the MDS-PAC is notably lengthy and complex, featuring more than 400 items and at least 7 different time frames for patient assessment, ranging from the previous 24 hours to the previous 7-14 days. The fact that the MDS-PAC represents a modification of an instrument designed for use with long-term care patients also provides grounds for further consideration.

In moving ahead to develop assessment instruments to meet the BIPA mandate, MedPAC urges the Secretary to begin with a strong sense of the purposes for which patient assessment data will be used and a goal of defining the minimum set of information needed to accomplish those purposes. To the extent practical and appropriate, the same information should be collected in the same way across settings. Expert consultation will be required to evaluate the extent to which information needs are comparable across settings.

The Commission believes that some common ground will be identified. For example, patient assessment instruments will need to collect information that can be reliably used to predict resource use. Four groups of patient characteristics are known to be important in determining resource use in at least two of the four post-acute settings:

- Functional status is an important factor driving resource use in at least three of the four settings—long-term hospitals may be an exception, although that is being tested.
- Diagnosis is an important predictor of resource use in rehabilitation facilities, long-term hospitals, and SNFs (Cameron 1983, Cotterill 1986, Kramer et al. 1997a).
- Comorbidities are thought to be important in all four settings (Carter et al. 2000, Goldberg et al. 1999, Kramer et al. 1997a).
- Cognitive status also is important in predicting resource use in three of the four settings—long-term hospitals may be the exception.

The new legal requirement for development of common data elements can result in a better understanding of patient characteristics and the care delivered in post-acute care settings. The information gained will have the potential to improve current payment systems and lay a foundation for a more rational and

⁵ The BIPA also requires development of assessment instruments for beneficiaries using inpatient and outpatient hospital, outpatient rehabilitation, mental health, and end-stage renal disease services.

coherent system across post-acute care. To this end, MedPAC recommends that HCFA pursue two lines of research simultaneously: one on a patient classification system that works across post-acute settings, and another on bundled payments.

The need to pay correctly across settings

The potential for overlapping provision of services across post-acute settings makes crucial the consistency of payments across settings. Consistent payment systems would neither encourage nor discourage care in different settings; inconsistency may lead placement and care decisions to be made on the basis of financial, as opposed to clinical, considerations.

HCFA originally sought to base payment for care in SNFs, rehabilitation facilities, and long-term hospitals on a common unit of payment (per diem) and a common patient assessment tool (the MDS-PAC), and to use staff time costs as the measure of resource use in each setting (Hebrew Rehabilitation Center for Aged 1998).⁶ The Congress, however, mandated per-discharge payment and specific classification systems for rehabilitation facilities and long-term hospitals. With payment for home care dependent on a different unit of payment, patient assessment instrument and classification system, Medicare's payment systems for post-acute care are unique to each setting (Table 6-2).

As a result, we have only limited capability to monitor access and quality across post-acute settings or to make comparisons (MedPAC 2000), hampering our ability to assess the impact of new payment systems as they are implemented. For example, before enactment of the Balanced Budget Refinement Act of 1999 (BBRA), which increased payments for some patients, SNFs responded to the new PPS by changing their preferences for patients with certain clinical profiles and some high-acuity patients had difficulty

TABLE 6-2

Post-acute prospective payment systems

| Characteristic | Post-acute care setting | | | |
|--------------------------------|---|---|---|--|
| | Skilled nursing facility | Home health agency | Inpatient rehabilitation | Long-term hospital |
| Unit of payment | per diem | 60-day episode, with unlimited episodes | per discharge | per discharge |
| Patient assessment instrument | Minimum data set (resident assessment instrument) | Outcome and Assessment Information Set | Minimum data set for post-acute care or Functional Independence Measure | Unknown |
| Case-mix classification system | Resource utilization groups, version III | Home health resource groups | Functional independence measure-function related groups | Diagnosis related groups or all patient refined diagnosis related groups |
| Effective date | July 1, 1998 | October 1, 2000 | 2001* | October 1, 2002* |

Note: * estimated date

accessing SNF care (GAO 1999b, OIG 1999, OIG 2000b). Although researchers found that such patients received care in alternative settings, they could not determine which settings substituted for SNF care, nor could they determine whether beneficiaries had outcomes similar to those they would have had in SNFs.

RECOMMENDATION 6C

The Secretary should develop for potential implementation a patient classification system that predicts costs within and across post-acute settings.

Developing a classification system that works across post-acute care would facilitate consistency of payments across settings and allow Medicare to monitor the quality of care furnished to similar patients in different settings. Although developing one post-acute classification

system for all beneficiaries might not be possible, it might be feasible to have a classification system for specific types of care. For example, therapies—physical, occupational, and speech therapy—are furnished in all four post-acute settings. Holding other factors (such as patients' clinical risks) constant, Medicare should pay the same amount for these services regardless of setting.

Designing a system that works across settings will require a thorough exploration of the necessary information about patients who need post-acute care, the factors that need to be measured, and the most efficient ways to measure them. HCFA might benefit from convening a forum of leading experts in health service delivery and research on the best way to proceed with payment and quality monitoring systems across post-acute care. In conducting its research, the agency should also routinely and widely

6 HCFA never planned to use the same instrument or classification system for home health care. The agency decided to use a tool developed for quality measurement as the patient assessment instrument for the home health PPS.

distribute reports with enough detail to facilitate independent replication of results. Independent testing of any classification system developed—for reliability, validity, and administrative feasibility—should take place before implementation.

An alternative to developing a payment system consistent across settings would be to bundle payments and delegate decisionmaking to healthcare providers. Bundling would involve estimating the expected resource needs for patients with particular diagnoses, functional status, or other factors. It could be done by increasing payments for inpatient hospital services to account for expected post-acute care use or by making one payment to a post-acute care provider responsible for all subsequent services. In either case, it could lead to more patient-focused payment because payment would no longer depend on the setting in which care was provided.

At present, the notion of bundling payments remains conceptual. Little is known, for example, about which services should be included in a bundle or how bundling would work in practice. Different models should be explored, and testing the administrative feasibility and the effect of bundling designs on providers' incentives and patient care will be necessary before any implementation.

RECOMMENDATION 6D

The Secretary should conduct demonstrations to test the feasibility of including a larger scope of services in the payment bundle.

A demonstration of the bundling concept could assess several key issues: the entity that would receive payment and be responsible for care, what period of time and services should be included in the bundle, how to facilitate coordination of care, how payments would be designed and how providers would be held accountable.

Addressing more immediate issues of correct payment within settings

Of the four prospective payment systems mandated by the BBA for post-acute care settings, two—for SNF and home health care—have been implemented, and the PPS for inpatient rehabilitation care is scheduled to begin later this year. Because changing from cost-based reimbursement to prospective payment alters providers' financial incentives, each of the new systems raises issues that warrant either changes in Medicare's policies or close monitoring to ensure that beneficiaries have access to needed care.

With respect to SNFs, the Commission is concerned because the new PPS does not appropriately match payments with expected resource costs for certain patients and we do not believe that continuing to refine the current system will be successful. There is no evidence that beneficiaries face problems in accessing SNF care, and increases in payments enacted in the BBRA and the BIPA provide some breathing room until a new payment system can be developed. In the meantime, however, close monitoring of access and quality is necessary.

The key issue for rehabilitation facilities is establishing which assessment instrument has the greatest potential to produce accurate payments and cause the least disruption to beneficiaries or providers. HCFA intends to use the MDS-PAC, the patient assessment instrument the agency originally planned to use in the three institutional post-acute settings. Although using the MDS-PAC would appear to move post-acute care closer to the Commission's stated interest in common assessment data, the limitations of the MDS-PAC indicate that it is not the vehicle to accomplish this goal. Therefore, the Commission believes that HCFA should instead use the Functional Independence Measure (FIM) because it

was used to develop the patient classification system and most facilities already use it. The FIM should be used until a tool can be developed that incorporates common data elements applicable across post-acute care settings.

For home health care, the interim payment system put in place following enactment of the BBA was problematic, in part because it did not account for variation in resource use among patients. The PPS, implemented in October 2000, introduces case-mix adjusted payments, and the BIPA put more money into the system by raising base payment rates above those previously in law. Given the changes in incentives that the new system creates, close monitoring is essential to ensure that beneficiaries' access to care is not compromised.

Improving payments for skilled nursing facility care

Two issues matter in assessing whether payments for a particular type of care are appropriate. First, does the distribution of payments across patients match their expected use of resources? A proper distribution of payments is important so that incentives are not created for providers to avoid patients for whom payments are too low. The second issue is whether aggregate payments—which depend on the base payment—are appropriate.

In the short run, making sure that aggregate payments are neither too high nor too low can ameliorate problems with the distribution of payments. This is the case with payments to skilled nursing facilities: significant limitations in how Medicare classifies SNF patients under the new payment system raise the potential for some patients to have difficulty in accessing care. Although there is no current evidence of significant problems with access to SNF care, these limitations must be addressed. MedPAC believes that aggregate payments—taking into account newly enacted payment increases—give the program time to do so.

Fixing the distribution of payment

Under the PPS, skilled nursing facilities are paid according to case-mix adjusted per diem payment rates intended to cover the routine, ancillary, and capital-related costs of furnishing SNF services. The bundle consolidates all post-hospital SNF services covered under Part A, including those services for which payment had been made under Part B before PPS.⁷ The case-mix adjustment in the PPS is based on the Resource Utilization Groups, Version III (RUG-III) case-mix groups to which patients are assigned. These assignments are determined by periodic patient assessments using the Minimum Data Set (MDS).

RUG-III is a 44-group hierarchical patient classification system that measures patients' relative resource use on the basis of staff time to provide nursing care and rehabilitation. It does not adequately measure the resource needs of patients who require multiple types of services, such as extensive medical services and rehabilitation, or nontherapy ancillaries (such as pharmaceuticals, laboratory tests, imaging, and transportation) (MedPAC 2000). Without adjustments, such as those in the BBRA and the BIPA, payments for these patients would be too low.

In April 2000, HCFA issued a proposed rule with two models to refine the RUG-III. Both were developed using data from the SNF PPS demonstration and preserved the existing structure of the case-mix classification system. The agency promised to test these models with nationally representative data before issuing the final rule. In July, HCFA announced that neither refinement model worked with national data and that the 20 percent increase in payments for the 15 groups required by the BBRA would remain in effect until refinements are completed.⁸

The failure of the refinement models raises the issue of whether the RUG-III case-mix system can pay correctly for SNF patients. Independent research suggests that it cannot because the limitations are intrinsic to the system. Consequently, MedPAC believes that HCFA should develop a new classification system.

The current classification system has four fundamental problems. First, it is based on a patient assessment instrument that does not collect the information needed to account for the needs of patients who need SNF care. Second, the system is subject to a high rate of error in classifying patients. Third, the system uses only certain staff time costs as a measure of resource use instead of all costs of providing SNF care. Finally, the system is subject to manipulation.

The patient assessment instrument underlying RUG-III—the MDS—was developed to guide care planning for residents in nursing homes. It does not measure variables with which to classify SNF patients appropriately, especially non-rehabilitation patients (Hebrew Rehabilitation Center for Aged 1998, Kramer et al. 1999, Kramer et al. 2000a). Further, the instrument was never tested with SNF patients only and the MDS does not adequately assess the more intensive needs of post-acute patients (Hebrew Rehabilitation Center for Aged 1998).

Two studies of the accuracy of RUG-III assignment have found a high rate of error. One study found that 76 percent of the assignments were not supported by medical records (OIG 2000a).⁹ Preliminary results of the other study found that the rate of error (over 60 percent) was consistent across all facilities studied and was higher for Medicare patients than for non-Medicare patients (Moore et al. 2000). The latter researchers speculate that the consistency of error may be due to the length of the MDS

assessment or the frequency of administration—SNF patients must be assessed on days 5, 14, 30, 60, and 90. However, they also found that when two individuals assessed the same patient, they frequently obtained different scores. Fewer than one-fourth of RUG-III items had good interrater reliability, which may explain the high error rate.

When RUG-III was introduced in the early 1990s, it explained 55.5 percent of variation in staffing (nursing and rehabilitation) costs for individuals in selected units in 228 nursing homes in seven states, both SNF patients and long-term residents (Fries et al. 1994). However, tests of the RUG-III found very low explanation of variance (9.4 percent and 10 percent, respectively) using costs of caring for SNF patients only (Fries et al. 2000, White et al. 1998). In another study that used staff time as a measure of resource use, researchers found that the range in resource use within groups was very large, but that the difference in resource use among groups was small (Kramer et al. 1999); one objective for a case-mix system is to have little variation within groups and wider variation among groups.

Because the classification of patients in RUG-III rehabilitation groups is based on services provided rather than patient characteristics, and because payment rates are higher for these classes, the system gives SNFs incentives to provide therapies when they may not be beneficial. The evaluation of quality and outcomes for the SNF PPS demonstration found no difference in outcomes (rehospitalizations, urinary tract infections, pneumonia, or discharge to the community) between test and control groups, although provision of therapies increased in the test group, in which payment was based on the RUG-III classification system (Kramer et al. 2000a). Researchers found the largest increase in therapy provision for patients who required the lowest levels of therapy,

7 Services not included in the SNF bundle are physician and certain other services specifically excluded under the BBA and the BBRA but furnished to SNF residents during a Part A covered stay.

8 The 15 groups fall under the categories of Extensive Services, Special Care, Clinically Complex, High Rehabilitation, and Medium Rehabilitation.

9 HCFA maintains the MDS is part of the medical record and does not have to be duplicated in that record.

such as those with the greatest functional ability and medical patients with congestive heart failure (CHF) or chronic obstructive pulmonary disease. Patients with CHF in the test group received almost as much weekly therapy as did patients with hip or pelvis fracture; in the control group, CHF patients received half as much therapy.

RECOMMENDATION 6E

The Secretary should develop a new classification system for skilled nursing facility care while continuing to monitor access and quality.

The Commission believes that HCFA should discontinue attempts to refine the RUG-III and focus its resources on developing a new classification system. Because of the limitations to the current system, HCFA will also need to continue monitoring access to and quality of care. We recognize that these tasks will entail a substantial amount of work on the part of the agency and we recommend that appropriate financial and staffing resources be made available for it.

Aggregate payments to skilled nursing facilities

Changes in Medicare payments to SNFs following the enactment of the BBA and bankruptcy filings by several major nursing home chains have raised concerns among some observers that payment rates may be too low. In view of the problems with the payment rates for certain patients, insufficient aggregate payments would be a particular concern because SNFs could not rely on higher-than-needed payments for some patients to offset lower-than-needed payments for others until a new classification system can be developed. Although the evidence is mixed, MedPAC believes that the spending levels that will occur under the BBRA and the BIPA will provide adequate aggregate resources to maintain beneficiaries' access to care in skilled nursing facilities in the coming year.

Why might skilled nursing facility payment rates be too low? Concerns about the adequacy of payments have focused on two indicators: the decline in

Medicare spending for SNF care—aggregate payments to SNFs fell 16.8 percent from fiscal year 1998 to fiscal year 1999, when the PPS was first implemented—and several Chapter 11 bankruptcies among large chains. Industry observers suggest three reasons why payment rates are too low:

- the base PPS rate did not include the costs of SNFs that had been exempt from Medicare's cost limits or that had so-called atypical exceptions;
- the base PPS rate did not include all of the costs for hospital-based facilities; and
- any changes in case-mix intensity between the year on which the base PPS rate was calculated (1995) and the year the PPS was implemented (1998) would not be reflected in payment rates.

The first two of these points reflect policymakers' judgment. The third point is empirically testable and our analysis suggests that case mix did not increase between 1995 and 1998.

Before enactment of the BBA, Medicare exempted new facilities from the program's routine cost limits because they were believed to incur start-up costs. The program also allowed SNFs with above-average costs to qualify for higher reimbursement through exceptions to the routine cost limits, and the number of these SNFs increased rapidly. In excluding the costs associated with exemptions and exceptions from the base PPS rate, the Congress accepted the findings of two government agencies that ensuring access to SNF care could be achieved more efficiently than had been the case under cost-based reimbursement. Because the number of SNFs had increased rapidly, the Prospective Payment Assessment Commission (ProPAC) recommended eliminating exemptions for new providers on the grounds that Medicare no longer needed to help finance the start-up costs of new facilities (ProPAC 1997a). The General Accounting Office (GAO) found that the exceptions policy did not adequately

distinguish between facilities with higher-than-normal costs that reflected patient's needs and those that were inefficient (GAO 1996).

The Congress reached a similar conclusion with respect to the higher costs of hospital-based SNFs. The BBA required HCFA to set PPS rates equal to a weighted average of the costs of freestanding SNFs plus 50 percent of the difference between the freestanding mean and a weighted mean of the combined costs for hospital-based and freestanding SNFs. Thus, the costs of hospital-based SNFs were not fully included in the base rate. Congress may have required this method because routine costs for hospital-based SNFs were more than twice as high as those for freestanding SNFs (ProPAC 1997b). Further, costs for the most expensive hospital-based SNFs were almost four times those for the least expensive ones; variation in the costs of freestanding SNFs was less dramatic. Some of the greater variation in costs for hospital-based SNFs may have reflected variation in case mix, but some may also have reflected hospitals allocating overhead costs to their SNFs. Including such costs in the PPS base rate would not be appropriate.

When the SNF PPS was implemented in 1998, the base payment rate was calculated on the basis of 1995 costs, trended forward for inflation. Industry observers have noted that if case mix and concomitant services increased appreciably between 1995 and 1998, the aggregate base rate would be too low (King 2000). For example, the continuing decline in length of inpatient hospital stays and increased patient acuity could have resulted in a more complex case mix than that accounted for in the base payment. Using a measure of case-mix intensity of admissions to SNFs, however, we find that case mix did not change over that period (see text box, p. 98).

The acuity of SNF patients could increase without being reflected in a measure of case mix at admission. But even if that were true, it would not follow that payments in 1998 were too low unless the

Change in case mix upon admission to a skilled nursing facility: 1995-1999

To estimate changes in the resource needs of skilled nursing facility (SNF) patients between 1995 and 1999, MedPAC created a case-mix index (CMI) based on all patient refined diagnosis related groups (APR-DRGs). This index measures the average severity of SNF patients at the time of admission; we use it as a proxy for the resource needs of those patients during their SNF stay. Relative weights were derived for each APR-DRG severity class and a CMI for each SNF facility was calculated based on cases within the skilled nursing facility between 1995 and 1999. A CMI greater than 1.0 implies that more resources are required to treat patients; an index less than 1.0 implies that fewer resources are needed.

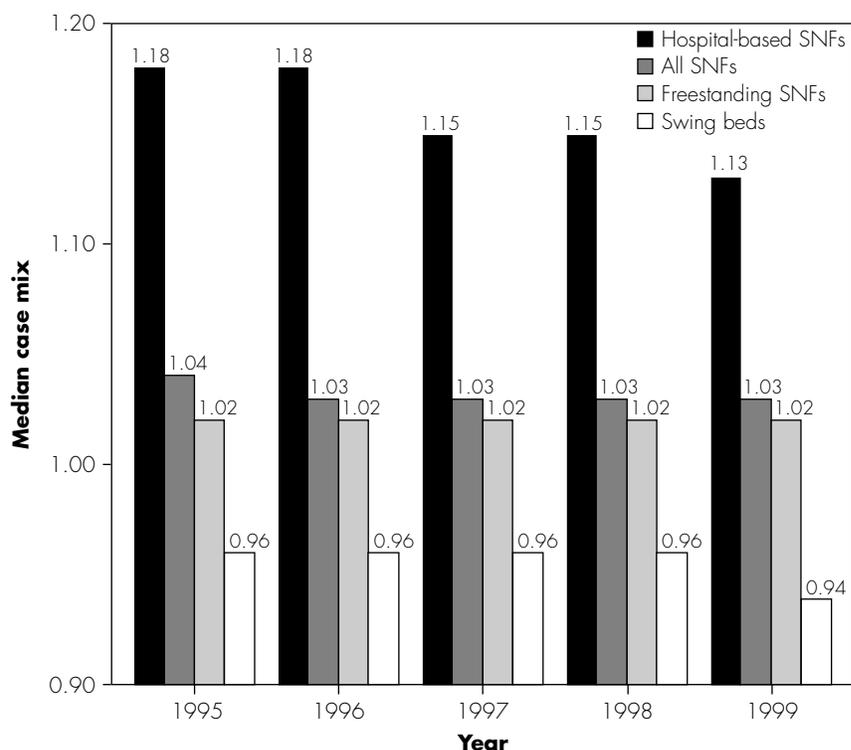
We found that the median CMI among SNFs declined slightly, from 1.04 in 1995 to 1.03 in 1999. This suggests that the clinical acuity of patients admitted to SNFs changed little between 1995 and implementation of the PPS. The median CMI actually declined for hospital-based facilities, falling from 1.18 to 1.13 between 1995 and 1999 (Figure 6-1). During the same time period, the CMI among freestanding facilities remained unchanged at 1.02. The lack of change is noteworthy because freestanding SNFs represent 80 percent of all facilities and provide care to approximately 65 percent of all SNF patients.

These conclusions must be tempered by the limitations of using APR-DRGs at admission as a proxy for patients' resource needs during their SNF stay. These limitations include:

- APR-DRGs account for severity differences associated with complications and coexisting conditions during the hospital stay, which may or may not affect acuity during the following SNF stay.

FIGURE 6-1

Change in median skilled nursing facility case mix at admission, by facility type, 1995-1999



Note: SNF (skilled nursing facility).

Source: MedPAC analysis of 1995-1999 last quarter inpatient and SNF claims.

- The index does not account for the functional status of patients in SNFs.
- There also may be unmeasured differences in patient health status that are unrelated to changes in the hospitalized population or in hospital length of stay.
- We do not know how changes in hospital lengths of stay affect nursing resources and rehabilitation intensity during subsequent SNF stays.
- Changes in International Classification of Diseases, Ninth Edition, Clinical Modification coding over time may reduce the precision of assignments for some cases among APR-DRG severity classes, particularly in the earlier years.
- Part of the decline in the proxy index between 1998 and 1999 may be attributable to a drop in hospitals' case-mix index in reaction to efforts by the Department of Justice and the Inspector General to combat fraud and abuse (see Chapter 5). ■

1995 costs on which they were based were appropriate. Studies by two government oversight agencies indicate that 1995 costs were, in fact, too high, because of unwarranted growth in ancillary expenditures and undetected unnecessary costs or inappropriate billing for services. These studies suggest that base year costs included too many services and that the costs per service were inappropriately high (GAO 1998). Further, unnecessary and undocumented therapy, as well as substantial mark-ups on occupational therapy, were not identified before the implementation of the prospective payment system and thus were included in base year costs (OIG 1999).

Assessing the adequacy of aggregate payments to skilled nursing facilities Notwithstanding the argument that policymakers intentionally excluded certain costs from the base rate for the SNF prospective payment system, the question remains whether the decline in spending and use that followed its implementation indicate a problem. We examined this issue in detail and found no evidence of a critical access problem that would justify an increase in the SNF base payment beyond the increases in payments that were enacted in the BBRA and the BIPA. Our analysis is based on three indicators: changes in spending and use of SNF services between 1996 and 1999, exit and entry into the SNF market, and access to SNFs.

The data on spending and use before and after implementation of the PPS do not indicate an inappropriate aggregate payment level. Medicare's payments to SNFs decreased by 16.8 percent between fiscal years 1998 and 1999, from \$11.3 billion to \$9.4 billion (Table 6-3). This decline, however, needs to be interpreted in a larger context. Spending in 1999 was still higher than it was in 1996, a year in which HCFA, GAO, and the Office of the Inspector General (OIG) believed payments to be excessive. Spending increased by 19 percent from 1995 (\$7.6 billion) to 1999 (\$9.4 billion) and the average payment per day increased 11 percent (\$190 to \$223). The number of discharges from skilled nursing facilities

TABLE 6-3 Payment and use of skilled nursing facilities, by calendar year

| Calendar year | Discharges | Payment (billions) | Covered days | Average days/discharge | Average pay/day |
|---------------|------------|--------------------|--------------|------------------------|-----------------|
| 1995 | 1,228,799 | \$7.6 | 40,591,637 | 32.95 | \$190 |
| 1996 | 1,318,006 | 9.3 | 44,638,581 | 33.87 | 206 |
| 1997 | 1,581,734 | 11.0 | 47,295,120 | 29.90 | 234 |
| 1998 | 1,587,931 | 11.3 | 45,240,400 | 28.49 | 251 |
| 1999 | 1,449,536 | 9.4 | 42,534,503 | 29.34 | 223 |

Note: Data include Puerto Rico, Virgin Islands, and unknown. Data do not include swing bed units.

Source: HCFA.

in 1999 was 8.7 percent below the previous year, but still above 1996 levels. And the average length of stay, which had decreased from 1996 to 1998, actually increased slightly (from 28.5 to 29.3 days) after HCFA implemented the PPS.

Following a large increase between 1996 and 1998, the number of certified SNFs decreased slightly between 1998, the year the PPS was implemented, and 2000 (Table 6-4). This decline, which was accompanied by Chapter 11 bankruptcies among large nursing home chains, has raised concerns that patient access may be impaired. These concerns have been

mitigated by the payment increases enacted in the BBRA and the BIPA. Moreover, the total number of SNFs in 2000 was greater than it was in 1997. The decrease in the number of hospital-based facilities, however, raises concern about their ability to adjust to the PPS.

Shortly after the PPS was implemented, two studies found that more complex patients were delayed entry into SNFs (GAO 1999a, OIG 1999). These studies found that there were no widespread access problems, however, and concern about the abilities of select groups of patients to access SNF care is mitigated

TABLE 6-4 Number of certified skilled nursing facilities, by type and year

| Facility type | 1996 | 1997 | 1998 | 1999 | 2000 |
|--------------------------|--------|--------|--------|--------|--------|
| Medicare Only | | | | | |
| Hospital-based | 965 | 1,010 | 1,036 | 943 | 803 |
| Freestanding | 424 | 449 | 428 | 422 | 419 |
| Medicare/Medicaid | | | | | |
| Hospital-based | 1,115 | 1,113 | 1,135 | 1,131 | 1,094 |
| Freestanding | 11,578 | 12,120 | 12,436 | 12,437 | 12,519 |
| Totals | | | | | |
| Hospital-based | 2,080 | 2,123 | 2,171 | 2,074 | 1,897 |
| Freestanding | 12,002 | 12,569 | 12,864 | 12,859 | 12,938 |
| All facility types | 14,082 | 14,692 | 15,035 | 14,933 | 14,835 |

Source: MedPAC analysis of HCFA On-line Survey, Certification, and Recording System (OSCAR) data.

by a more recent study that found fewer access problems (OIG 2000b). This study was completed after the BBRA increases in SNF payment, suggesting that problems in access found in the earlier studies may have been addressed.

Implementing a prospective payment system for inpatient rehabilitation services

The BBA required HCFA to design and implement a PPS for inpatient rehabilitation services. The agency has developed a PPS to pay rehabilitation facilities for beneficiaries' care on a per discharge basis starting in 2001. Payments under the new system will cover all operating and capital costs associated with furnishing covered rehabilitation services (see text boxes, p. 100 and p. 101). MedPAC supports implementing the PPS, but we recommend that HCFA use a different patient assessment instrument than the agency has proposed, increase the pool of funds reserved for outlier cases, and reexamine the payment adjustment for facilities serving a disproportionate share of low-income patients.

Choosing the patient assessment instrument

The Congress mandated use of the Functional Independence Measure-Function Related Group (FIM-FRG) patient classification system as the basis for the inpatient rehabilitation care PPS. Use of the FIM-FRG requires that rehabilitation facilities collect and report the patient assessment data used to classify patients for payment.

The decision regarding which patient assessment instrument to use for Medicare payment and quality monitoring in rehabilitation care has come down to two options: the Functional Independence Measure (FIM) or the MDS-PAC. Based on criteria MedPAC has established for selecting an appropriate patient assessment instrument, the Commission favors use of the FIM pending development of a tool that incorporates common core elements applicable across post-acute care settings.

RECOMMENDATION 6F

Until a core set of common data elements for post-acute care is developed, the Secretary should require the Functional Independence Measure as the patient assessment tool for the inpatient rehabilitation prospective payment system.

The FIM-FRG patient classification system was originally developed and tested using items from the FIM, a tool used for patient assessment by at least 70 percent of rehabilitation facilities, some of which have used the instrument for 10 years or more. The FIM is an 18-item instrument that covers 6 domains and

produces motor and cognitive scores. It takes about 20 minutes to administer. Agencies have used the FIM to evaluate and monitor outcomes of rehabilitation care. The FIM is limited primarily in its applicability across post-acute care settings, although it is used to evaluate rehabilitation patients by some SNFs.

MedPAC believes that the FIM can furnish accurate information for patient classification because the FIM-FRGs were originally developed using data from this instrument. Using the FIM also would minimize data collection burden and disruption for beneficiaries and providers because so many facilities are familiar with the instrument.

Inpatient rehabilitation prospective payment calculation

A hypothetical rehabilitation hospital is located in Kansas City, Mo., and has a Tax Equity and Financial Responsibility Act rate of \$12,000 and a low-income proportion of 11 percent. The facility will be paid as follows for a patient with a stroke in case-mix group 0107 who has no comorbidities and a typical stay in August 2001.

Payment calculation:

| | |
|---|------------------------------|
| Base rate | \$6,024 |
| multiplied by case-mix relative weight | × 1.2630 |
| product | \$7,608.312 |
| multiply by labor-related portion | × 0.71301 |
| labor-related portion of rate | \$5,424.803 |
| multiply by wage index for Kansas City metropolitan statistical area | × 0.9281 |
| add wage-adjusted amount to non-labor amount | \$5,034.759 + \$2,183.509 |
| wage-adjusted federal total | \$7,218.269 |
| multiply by disproportionate share adjustment (formula applied to 11% low-income share) | × 1.885 |
| total adjusted Federal prospective rate | \$13,606.44 |
| divide by 3 to calculate federal portion of payment | ÷ 3 |
| federal portion | \$ 4,535.479 |
| add to facility-specific portion | + \$12,000 × 2/3 |
| Total payment | \$12,535.48 |

Elements of the inpatient rehabilitation prospective payment system

The inpatient rehabilitation prospective payment system (PPS) is scheduled to begin in 2001 and will pay for services on a per-discharge basis (HCFA 2000). Case-based payment matches the unit of service and the product for inpatient rehabilitation. The PPS bundle is intended to reflect all operating (routine and ancillary) and capital costs associated with furnishing covered rehabilitation services.

The PPS will classify most patients into 1 of 92 groups, based on diagnosis, age, and functional and cognitive statuses. In most groups, patients with one or more comorbidities will be assigned to a subgroup that has a higher weight and results in a higher payment. Simulations indicate that the proposed system explains 62.7 percent of variation in patient-level costs.

The PPS will pay differently for special patients who do not receive a full course of rehabilitation—such as transfer cases, short-stay outliers, and patients who die in the facility—and for interrupted rehabilitation stays. There are different case-mix weights and therefore payment rates for each special case:

- Transfers are defined as patients whose length of stay exceeds three days and who are not discharged to the community. For these patients, facilities will be paid a daily per

diem amount equivalent to an average daily payment for the case-mix group. The Health Care Financing Administration (HCFA) does not propose including discharges to home health care, day programs, or outpatient therapy in transfers.

- Short-stay outlier cases include patients whose length of stay is three days or less and who are not transfers.
- HCFA proposes that patients who die in the rehabilitation facility within three days of admission be classified as short stay. For other patients who die in the facility, payment will be based on their length of stay and type of diagnosis (orthopedic or non-orthopedic).
- Interrupted stays are cases in which beneficiaries return to a facility by midnight of the third day following a discharge. Facilities will be paid one payment for these patients, based on the first assessment.

The case-mix-adjusted payment will be further adjusted for geographic wage differences. The labor-related portion of the payment—71.301 percent—will be adjusted using the wage index for acute care hospitals. HCFA proposes two additional facility-level adjustments for the inpatient rehabilitation PPS: an adjustment for

rural facilities and a formula applied to the proportion of low-income patients. The agency will make no adjustment for facilities in large urban areas or those that operate graduate medical education programs because researchers found no significant differences in costs for facilities with these attributes.

HCFA proposes increasing payments to rural facilities by 1.16 because researchers have found that rural facilities' standardized cost per case was 15 percent higher than the national average. These facilities tend to have fewer cases and a longer average length of stay than urban facilities.

HCFA-sponsored research found that as a facility's percentage of low-income patients increases, there is an incremental increase in costs (Carter et al. 2000). Under the PPS, low-income patients will be defined as Medicare beneficiaries who also receive Supplemental Security Income (SSI) and Medicaid patients who are not covered by Medicare. The low-income proportion for the facility, or disproportionate share (DSH), will be calculated as the number of SSI days for Medicare patients divided by total Medicare days, plus the number of Medicaid days for non-Medicare patients divided by total days. The payment will be adjusted by the following formula:
$$((.0001 + \text{DSH})^{.0905} / (.0001)^{.0905})$$
 ■

Rather than mandate use of the FIM, however, HCFA has proposed to require the MDS-PAC, an instrument that the agency originally developed to assess patients across post-acute care settings for payment and quality monitoring purposes. Although MedPAC supports use of an instrument that can provide common information across settings, the

Commission has concerns as to whether the MDS-PAC can serve such a role, as discussed above. The Commission also questions whether the MDS-PAC meets other objectives, such as providing an accurate basis for payment and minimizing the burden associated with providing data.¹⁰

A first key question is whether the MDS-PAC replicates the FIM in producing the rehabilitation classification system. To answer this, HCFA funded a study conducted by researchers from RAND Corporation and Harvard University. Although results from the study are not yet available, concerns have been raised about the potential of the instrument to produce accurate classification.

¹⁰ In 1999, MedPAC believed the MDS-PAC was a promising development as a new patient assessment tool across post-acute care (MedPAC 1999). At the same time, the Commission also had more confidence in the validity of the payment groups and weights of the FIM-FRG.

The length and complexity of the MDS-PAC provide one basis for this concern. The MDS-PAC consists of more than 400 items and includes at least 7 different time frames for patient assessment, ranging from the previous 24 hours to the previous 7-14 days. The method for scoring functional status used by MDS-PAC, which is the reverse of that used by the FIM, could also lead to coding error because many scorers may be familiar with the other instrument.

Concerns also have been raised that the MDS-PAC cognitive scale may not accurately assess patients' cognitive status. This domain comes from the MDS and researchers have found that it does not work the same way with both cognitively impaired and intact patients (Casten et al. 1998, Lawton et al. 1998). This scale also had one of the highest error rates of all MDS domains in a recent test (Moore et al. 2000).

In addition to concerns about accuracy of patient classification, MedPAC also has concerns about the burden of data collection posed by the MDS-PAC. Given HCFA's proposed requirement that facilities conduct assessments at 3, 11, 30, and 60 days, as well as discharge, and a 16-day average length of stay, most inpatient rehabilitation patients will be assessed three or more times. A simpler, shorter instrument, such as the FIM, would reduce the burden associated with the frequency of data collection.

Improving the payment system

Medicare generally makes extra payments under prospective payment for cases that have unusually high costs compared with regular payments. These extra payments, called outlier payments, are intended to limit providers' financial risk from extraordinary cases and to reduce providers' financial incentives to avoid patients with especially serious conditions or to stint on their care. Another potential source of financial risk is providing care to low-income patients. Medicare adjusts some facility payments according to the share of low-income patients served.

The BBA restricts the inpatient rehabilitation high-cost outlier pool to a maximum of 5 percent of total payments. Outlier payments are financed by reducing base payments proportionally to the size of the outlier pool. For example, if the outlier policy is 5 percent, the base payment is reduced by that amount. HCFA proposes a 3 percent outlier pool; facilities will be paid the adjusted case-mix group payment plus 80 percent of the estimated cost of a case that exceeds \$7,066.

Researchers who developed the payment system recommended a 3 percent outlier policy for two reasons. First, although increasing the outlier pool improves payment accuracy at the patient and facility level and reduces facilities' financial risk, the rate of improvement decreases when the outlier pool exceeds 3 percent. Second, the research showed that although most outlier payments will be for cases that lose money, some cases will receive payments in excess of costs. The greater the outlier pool, the more outlier cases that receive payments in excess of costs; the number of cases with payments in excess of costs under a 5 percent outlier policy would be almost double the number under a 3 percent policy (Carter et al. 2000).

Nevertheless, the Commission is concerned about high-cost patients who may face problems obtaining access to care or stinting on care once they are in a facility. Therefore, we recommend a 5 percent policy for the inpatient rehabilitation PPS until research under the new payment system determines whether a different percentage is needed.

RECOMMENDATION 6G

The Secretary should require a high-cost outlier policy of 5 percent for the inpatient rehabilitation payment system and study whether a different percentage policy is needed.

We are concerned that high-cost beneficiaries will not be protected sufficiently under the 3 percent outlier policy that HCFA has proposed. We believe that a 5 percent policy better

protects patients' access to care and protection from stinting. A larger outlier pool will protect more patients and the payment-to-cost ratio for high cost patients will be greater (Carter et al. 2000). Because even a 5 percent outlier policy may not protect patients adequately, HCFA will need to monitor beneficiaries' access to inpatient rehabilitation and study patients with extraordinary costs. Legislative action would be required to facilitate a different policy with a higher percentage.

In developing the PPS, researchers found that rehabilitation facilities' per-case costs rise as their percentage of low-income patients—Medicare beneficiaries who receive Supplemental Security Income and Medicaid patients who are not covered by Medicare—increases. As with the acute care hospital PPS, HCFA proposes to increase payments to facilities that treat a disproportionate share of low-income patients. The formula, however, will result in disproportionate share (DSH) payment shaving a larger effect on payment than either the case-mix or wage indices. Other things being equal, a facility whose share of low-income patients is 0.5 percent will have payments 43 percent larger than a facility with no low-income patients.

RECOMMENDATION 6H

The Secretary should reexamine the disproportionate share adjustment for the inpatient rehabilitation prospective payment system.

We believe the DSH adjustment is larger than appropriate and that HCFA should reexamine it as soon as possible. The agency also needs to determine whether there are strong clinical reasons for the differences in costs for low-income patients and others and whether the magnitude of costs differences is plausible, given any clinical differences. For the acute hospital PPS, researchers did not find a strong relationship between a facility's low-income share and its per case costs. More recently, policymakers have concluded that the primary problem resulting from treating low-income patients is underpayment or nonpayment

(MedPAC 2000). Consequently, DSH policy is designed to address Medicare's share of the shortfall.

Another issue related to DSH is which low-income share to use in calculating the adjustment. For hospital-based units (80 percent of facilities), researchers used the hospital's low-income share to model the DSH adjustment because they did not have unit-specific information available. HCFA needs to examine whether low-income patient shares are the same for the hospital and the rehabilitation unit.

Home health prospective payment system

The prospective payment system for home health care, which was implemented October 1, 2000, is intended to pay for all home health goods and services provided during a 60-day episode of home health care. Home health agencies must bill for all services (except durable medical equipment) provided in an episode, whether they provide the services directly or contract with an external supplier. Medicare beneficiaries may receive an unlimited number of episodes of care, as long as they remain homebound and need intermittent or part-time skilled care.

The episode rate is case-mix adjusted by an 80-category classification system, the Home Health Resource Group (HHRG), based upon the patient's clinical and functional status and the severity of their condition upon admission. The Outcome and Assessment Information Set (OASIS) is used to assess patient status. As with the 60-day episode unit of payment, the assessment instrument is unique to the home health setting.

The PPS is an improvement over the interim payment system (IPS) that was implemented following enactment of the BBA. The IPS was widely criticized because payments were not adjusted for differences in case mix, which may have resulted in some beneficiaries experiencing problems in accessing home health care (Stoner et al. 1999). The PPS

introduces case-mix-adjusted payments, which should reduce incentives for providers to avoid beneficiaries with costly needs. Further, the ability of beneficiaries to qualify for unlimited episodes as long as they meet eligibility criteria should benefit patients with longer-term needs for home health services. The BIPA also increased funding of home health services, which should alleviate concerns about widespread access problems. The BIPA increased rates for fiscal year 2001 by 1.1 percent, delayed a scheduled 15 percent reduction in base payments until October 2002, and increased payments for services provided in rural areas by 10 percent for two years, beginning April 1, 2001.

As the changes brought about by the new PPS affect beneficiaries, policymakers need to monitor the system to ensure that Medicare beneficiaries who need home health care have access to it. However, policymakers' ability to evaluate beneficiaries' access to home health is constrained by the imprecise definition of the benefit and the lack of clinical practice standards.

The benefit was initially conceived as short-term, post-hospital recovery care, but a requirement for a hospital stay and a limit on the number of covered days have been removed. The benefit is now available to beneficiaries who have a medical need for part-time or intermittent skilled care and who are confined to their home (homebound).¹¹ Although home health care is still used by Medicare beneficiaries for short-term recovery, it is also used for longer periods of time by beneficiaries with relatively stable, chronic health conditions. Without a clear goal in mind, it is difficult to place changes in use in the proper context. For example, decreases in the number of visits per beneficiary could reflect a greater focus on educating home health users in self-care, or it could be interpreted as a failure to meet the needs of those with chronic conditions.

The absence of clinical practice standards also constrains our ability to relate differences in service use to failure or success in meeting program goals. Home health use has varied considerably over time and by geographic location. For example:

- More than 100 fee-for-service beneficiaries per 1,000 used home health in 1996; only 80 per 1,000 used the benefit in 1999 (GAO 2000).
- Average visits per user by state varied from a low of 22 in Oregon to a high of 95 in Louisiana in 1999 (GAO 2000).

We do not know whether these variations reflect differences in access, variations in beneficiaries' health, the supply of alternatives, practice patterns, or some other factor. Standards of care are essential to relate changes in the level of service use to changes in access.

The PPS is apt to create some new problems. Possible trouble spots are stinting and access problems for some beneficiaries in underpaid HHRG classifications. Prospective payment introduces financial incentives for providers to stint on services to reduce costs while maintaining revenues. Once patients' HHRGs are determined and they receive five visits, reimbursement remains the same whether patients are visited once a week or twice a day. Some agencies may try to avoid admitting beneficiaries who are likely to fall into certain case-mix groups.

In theory, variations in the adequacy of payments for HHRGs should not pose a problem because losses on patients in an underpaid case-mix group can be offset by gains on patients in overpaid groups. In practice, variations in the adequacy of payment by HHRGs may encourage agencies to avoid patients based upon their likely group classification.

¹¹ Beneficiaries are homebound when they have a normal inability to leave home except with considerable and taxing effort, and when absences from the home are infrequent or for periods of relatively short duration, or are attributable to the need to receive medical treatment.

The case-mix adjuster also does not account for the presence or absence of an informal caregiver, even though this factor can alter the resource needs of a patient. Although many comments to HCFA on the proposed rule addressed this issue, the agency was concerned that a payment adjustment would make the Medicare home health benefit partially dependent on the socioeconomic status of the beneficiary and could introduce new and negative incentives into family and patient behavior. MedPAC supports HCFA's position on this issue, but we are concerned that the lack of a payment adjustment may result in providers not admitting eligible individuals without caregivers.

The PPS also does not adjust supplies for case mix and supply costs are not included in the calculation of outlier payments. Further, providers' responsibility for medical supplies includes all routine and non-routine supplies a patient may need over the course of an episode even when the need is not related to the cause of care. (For example, a beneficiary with an chronic leg ulcer who has been supplying her own dressings could be admitted to home health care to recover from a hip replacement. The provider will be responsible for dressing supplies for that beneficiary even though it is providing care for the hip replacement recovery.) This may create difficulties in paying adequately for complex patients, but judging the impact of putting agencies at risk for all supplies is difficult because estimates of supply costs vary widely, from significant levels to only 1 or 2 percent of the total cost of care.

RECOMMENDATION 61

In monitoring the performance of the payment system, the Secretary should pay particular attention to the use of significant change in condition payment adjustments and payments for patients with wound care needs.

The home health PPS includes a so-called significant change in condition (SCIC) adjustment that allows agencies to reclassify patients to another HHRG in the midst of an episode of care. If the payment system functions well, then patients' resource needs over the episode of care will be adequately predicted by the patients' HHRG. Frequent use of the SCIC adjustment, especially if these changes result in a mix of reclassifications into higher- and lower-paying groups, could thus be an early indication that the HHRG grouper does not account adequately for variation in resource needs. If SCIC adjustments cluster around the end of an episode, it may suggest that the classification system cannot predict resource use over a 60-day period and that the episode length needs to be reexamined.

Under the IPS, the proportion of beneficiaries with wound care needs fell by almost half from 1997 to 1998, from 10.6 percent of all admission diagnoses to 5.8 percent. This drop could suggest payments for wound care patients were not adequate under the IPS or that pre-BBA use was excessive. Although a case-mix adjusted PPS payment is an improvement over a flat case rate unadjusted for relative resource use, costly supplies and the possible need for frequent visits could make patients with wound care needs vulnerable under the new payment system.

In response to public comments on the proposed rule, HCFA adjusted the case-mix system for wound care patients. The adjusted HHRG provides additional points for multiple wounds and for wounds due to trauma. It also allows additional points for early-stage pressure ulcers. Despite these adjustments, the reimbursement for wound care HHRGs may still be low. Because reimbursement for supplies is not adjusted for the patient's diagnosis, the supply costs for wound care may be substantially higher than the supply cost reimbursement for that patient. Further, the reimbursement for the likely HHRGs for wound care patients may not be adequate for the frequent visits a wound care patient may require. HCFA should monitor the number of patients with wound care diagnoses to determine whether or not their use of services recovers under the new payment system and to evaluate whether these case-mix groups have appropriate relative weights.

The Commission's concern about supplies also relates to how agencies will respond to their new responsibility for all covered medical supplies over the course of the 60-day episode, even when some of those supplies are not related to the cause of care. It is not clear what will constitute due diligence on the provider's part to determine the medical supply purchasing habits of beneficiaries or how beneficiaries will be notified regarding the agency's responsibilities. It also is not clear how conflicts between the beneficiaries' choice of medical supplies and the agency's purchasing preferences would be resolved. HCFA should investigate agency behavior and the interpretations of fiscal intermediaries regarding this issue. ■

References

Cameron JM. Case-mix and resource use in long-term care, *Medical Care* 1983. Vol. 23, No. 4, p. 296–309.

Carter GM, Relles DA, Wynn BO, et al. Interim report on an inpatient rehabilitation facility prospective payment system. Santa Monica (CA), RAND. July 2000.

Casten R, Lawton MP, Parmelee PA, Kleban MH. Psychometric characteristics of the Minimum Data Set I: confirmatory factor analysis, *Journal of American Geriatrics Society*. June 1998, Vol. 46, p. 726–735.

Cotterill PG. Testing a diagnosis-related group index for skilled nursing facilities, *Health Care Financing Review* 1986. Vol. 7, No. 4, p. 75–85.

Fries BE, Lapane K, Moore T, et al. Variation in prescribed medication costs, method of collection and impact on skilled nursing facility case mix: technical expert panel briefing materials. Cambridge (MA), Abt Associates. February 28, 2000.

Fries BE, Schneider DP, Foley WJ, et al. Refining a case-mix measure for nursing homes: resource utilization groups (RUG-III), *Medical Care*. 1994, Vol. 32, p. 668–685.

Gage B. Impact of the BBA on post-acute utilization, *Health Care Financing Review*. Summer 1999, Vol. 20, No. 4, p. 103–126.

General Accounting Office. Medicare home health care: prospective payment system could reverse recent declines in spending. No. HEHS-00-176. Washington (DC), GAO. September 2000.

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. Skilled nursing facilities: Medicare payments need to better account for nontherapy ancillary cost variation. No. HEHS-99-185. Washington (DC), GAO. September 1999b.

General Accounting Office. Balanced budget act: implementation of key Medicare mandates must evolve to fulfill congressional objectives. No. T-HEHS-98-214. Washington (DC), GAO. July 1998.

General Accounting Office. Skilled nursing facilities: approval process for certain services may result in higher Medicare costs. No. HEHS-97-18. Washington (DC), GAO. December 1996.

Goldberg HB, Delary D, Schmitz RJ, et al. Case-mix adjustment for a national home health prospective payment system: second interim report. Cambridge (MA), Abt Associates. 1999.

Health Care Financing Administration, Department of Health and Human Services. Medicare program; prospective payment system for inpatient rehabilitation facilities; proposed rule. *Federal Register*, November 3, 2000, Vol. 65, No. 214, p. 66304.

Hebrew Rehabilitation Center for Aged. OMB supporting statement: development of an assessment system for post-acute care. Boston (MA), Hebrew Rehabilitation Center for Aged. January 1998.

Hogan C. Report to the Medicare Payment Advisory Commission: analysis of Medicare post-acute care placement and resource use. Vienna (VA), Direct Research. December 18, 2000.

Kane RL, Chen Q, Finch M, et al. The optimal outcomes of post-hospital care under Medicare, *Health Services Research*. August 2000, Vol. 35, No. 3, p. 615–661.

King R. Letter to Don Muse, Muse and Associates. Annapolis (MD), King Associates. April 2, 2000.

Keith RA, Wilson DB, Gutierrez P. Acute and subacute rehabilitation for stroke: a comparison, *Archives of Physical Medicine and Rehabilitation*. June 1995, Vol. 76, p. 495–500.

Kramer AM, Eilertsen TB, Hutt E, et al. Nursing home case mix and quality demonstration evaluation Final report volume 2: effects on outcomes and quality. In preparation. March 2000a.

Kramer AM, Kowalksy JC, Lin M, et al. Outcome and utilization differences for older persons with stroke in HMO and fee-for-service systems, *Journal of American Geriatrics Society*. July 2000b, Vol. 48, p. 726–734.

Kramer AM, Eilertsen TB, Ecord MK, Morrison MH. A prospective study of new case-mix indices for subacute care. Report to National Subacute Care Association and the American Health Care Association. Denver (CO), Morrison Informatics and University of Colorado Health Sciences Center. June 1999.

Kramer AM, Eilertsen TB, Stineman J, et al. Patient classification for per episode prospective payment in skilled nursing facilities. Denver (CO), University of Colorado Health Sciences Center. 1997a.

Kramer AM, Steiner JF, Schlenker RE, et al. Outcomes and costs after hip fracture and stroke: a comparison of rehabilitation settings, *Journal of American Medical Association*. Feb. 5, 1997b, Vol. 277, No. 5, p. 396–404.

Lawton MP, Casten R, Parmelee PA, et al. Psychometric characteristics of the Minimum Data Set II: validity, *Journal of American Geriatrics Society*. June 1998, Vol. 46, p. 736–744.

Manard BB, Bieg K, Cameron R, et al. Subacute care: policy synthesis and market area analysis. Fairfax (VA), Lewin-VHI. 1995.

Manton KG, Stallard E, Woodbury MA. Home health and skilled nursing facility use: 1982-1990, *Health Care Financing Review*. Fall 1994, Vol. 16, No.1, p. 155–186.

Medicare Payment Advisory Commission. Report to the Congress: Medicare payment policy. Washington (DC). MedPAC. March, 2000.

Medicare Payment Advisory Commission. Report to the Congress: Medicare payment policy. Washington (DC), MedPAC. March, 1999.

Moore T, Hurd D, White A, et al. Development and testing of Minimum Data Set accuracy verification protocol: draft final report. Cambridge (MA), Abt Associates. May 12, 2000.

Neu CR, Harrison S, Heilbrun. Medicare patients and post-acute care: who goes where? Santa Monica (CA), RAND. 1988.

Office of Inspector General. Nursing home resident assessment resource utilization groups. OEI-02-99-00041. Washington (DC), OIG. December 2000a.

Office of Inspector General. Medicare beneficiary access to skilled nursing facilities: 2000. OEI-02-00-00330. Washington (DC), OIG. September 2000b.

Office of Inspector General. Early effects of the prospective payment system on access to skilled nursing facilities, No. OEI-02-99-04400. Washington (DC), OIG. August 1999.

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

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

Schmitz R, Chen A, Archibald N. Development of clinical indicators for needed SNF care: feasibility assessment based on literature review and expert opinion: final report. For MedPAC, contract # RFP-01-000-MedPAC. Princeton (NJ), Mathematica Policy Research. 2000.

Steiner A, Neu CR. Monitoring the changes in the use of Medicare posthospital services. Santa Monica (CA), RAND. December 1992.

Stoner D, Goldberg HB, McCallum-Keeler G, Robinson C. Medicare Payment Advisory Commission (MedPAC) home health agency survey, 1999. Cambridge (MA), Abt Associates. 1999.

White AJ, Pizer S, White C, and Moore T. Development and refinement of the RUG-III resident classification system: preliminary findings. Cambridge (MA), Abt Associates. October 1, 1998.

