

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.
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6B The Congress should require HCFA to annually review the composite rate payment.
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6C For fiscal year 2001, the composite rate for outpatient dialysis services should be increased by 2.4 percent.
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6D HCFA should collect information on ESRD patients' satisfaction with the quality of and access to care.
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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.
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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

Because 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.

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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 1998.¹

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

¹ 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.² If

² 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,³ 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

³ 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.⁴

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 System⁵ (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.⁶ 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 25th percentile of all dialysis sessions; medium facilities are those reporting dialysis sessions greater than the 25th percentile but less than the 75th percentile of all dialysis sessions; large facilities are those reporting dialysis sessions equal to or greater than the 75th 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 25th and 75th percentile of dialysis sessions. Small facilities are those reporting dialysis sessions less than or equal to the 25th percentile of all dialysis sessions; medium facilities are those reporting dialysis sessions greater than the 25th percentile but less than the 75th percentile of all dialysis sessions; large facilities are those reporting dialysis sessions equal to or greater than the 75th 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).⁷ 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

⁷ 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. ■

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