SECTION 3D

Home health services

RECOMMENDATIONS

3D-1 The Congress should eliminate the update to payment rates for home health services for 2005.

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

3D-2 The Secretary should continue to monitor access to care, the impact of the payment system on patient selection, and the use of services across post-acute care settings.

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

SECTION 3D

Section 3D: Home health services

In this section

- Are Medicare payments adequate in 2004?
- How should Medicare payments change in 2005?
- Should the prospective payment system change?

Aggregate payments for home health services are more than adequate, relative to costs. Access to care for most beneficiaries is good; quality has remained stable. The number of agencies appears to have increased slightly in the past year. The Medicare margin for home health services in 2004 is 16.8 percent, suggesting that Medicare's payments more than cover the costs of caring for Medicare home health users. Our evidence suggests that productivity and product change will offset the increasing prices for home health inputs over the coming year; thus, the high margins will persist. However, the payment system may make some types of beneficiaries less financially attractive than others, which may lead providers to focus on some types of beneficiaries and be less willing to serve others. MedPAC and others should examine the payment system to determine whether refinements might promote access to care for all types of eligible beneficiaries.

Background

Home health care is skilled nursing, therapy, aide service, or medical social work provided to beneficiaries in their homes.[1] Medicare pays for home health service in units called episodes. Episodes begin with patients' admission to home health and end 60 days later. Most patients complete their course of care and are discharged in one payment episode. If patients' care is not completed within 60 days, they may start another episode of payment without a break in their care.

The payment system starts with a base payment for an episode of home health care. The base payment is adjusted to account for differences in patients' expected resource needs, as reflected by their clinical and functional severity, recent use of other health services, and therapy use (see text box). Payment is also adjusted for differences in local prices using the hospital wage index. Adjustments for several other special circumstances, such as unusually high costs or very short episodes, can also modify the payment:

- An outlier payment offsets some of the cost of an episode if the estimated cost exceeds the payment by a certain amount.
- A low utilization payment adjustment (LUPA) makes payment by the visit if a patient receives fewer than five visits during an episode.
- A change-in-condition adjustment can increase the payment for days remaining in the episode following a major change in the patient's health.
- A partial episode payment allows two agencies to split the payment for a patient who transfers from one agency to another during an episode.

The early 1990s were years of rapid growth in home health, both in the number of users and the amount of service they used. At the same time, the home health benefit increasingly began to resemble long-term care and look less like the medical services of other Medicare post-acute care benefits. For example, by 1996, one-third of all visits were provided to beneficiaries who received more than 300 visits a year (MedPAC 1998). Aide services were a large proportion of all visits, as opposed to skilled nursing and therapy visits.

In the middle of the 1990s, legislative and administrative steps were taken to check the growth of the benefit. The Balanced Budget Act of 1997 (BBA) included refinements to the eligibility standards and changes to the payment system that were followed by reduced spending on home health, decreased number of visits, and increased proportion of visits that were skilled nursing and therapy. Subsequent legislation established civil liabilities for physicians who knowingly falsely certified the eligibility of a beneficiary. The Secretary initiated Operation Restore Trust to investigate suspected fraud and abuse of the benefit.[2] For a complete discussion of the historic trends in spending and use of the benefit, see MedPAC's March 2003 report, Section 2D.

The total number of beneficiaries using the benefit grew for the first time in several years between 2001 and 2002, from about 2.2 million users to 2.4 million, a number similar to the level of use in the early 1990s. The Congressional Budget Office projects that home health spending will grow 17.7 percent in 2004 and continue to grow at an average annual rate of 14 percent from 2005 to 2009, driven by continued growth in volume. The Office of the Actuary at CMS predicts 7.6 percent average annual growth between 2005 and 2009, based on different assumptions about the rate of growth in volume.

Generally speaking, Medicare's home health benefit is relatively straightforward; the particulars of this benefit, however, are not clear (MedPAC 1999, 2000). By statute, the purpose of the home health benefit must be the same as the general purpose of all the services covered by the Medicare program: diagnosis or medically necessary treatment of illness, injury, or deformity over a spell of illness. However, precisely how the concepts of medical necessity and spell of illness pertain to home health is less clear for this service than for others. Home health has no definitive clinical practice standards to determine what treatments are necessary and for what kinds of patients they are appropriate. The range of services covered by home health is fairly broad: skilled services necessary to treat patients—nursing and therapy—as well as nonskilled or nonmedical services that are necessary to maintain the patients' health or facilitate their treatment—aide services and social work. Unlike other benefits that cover a broad range of services, there is no annual or lifetime limit on the number of days of home health care that Medicare will cover.

Instead, Medicare determines the amount of service the benefit will cover based upon the eligibility and needs of the beneficiary. As set forth in the manuals for home health, the program only covers home health services for

How is payment adjusted for patients' conditions?

The home health prospective payment system (PPS) uses indicators of the clinical severity of patients' conditions, their functional limitations, and their service use to adjust the payment for an episode of care to cover the expected cost of meeting patients' needs. Nurses or therapists assess each patient's needs at the beginning of the episode with a standardized tool called the Outcome and Assessment Information Set (OASIS). The OASIS includes tasks such as observing patients' functional ability, reviewing medical records, asking patients or their caregivers about their condition, and assessing patients' environments to determine a score for each of three domains: clinical, functional, and service use. For example, a patient with a surgical wound from a hip replacement who cannot easily move from her bed and will need therapy to restore her mobility could receive a minimum score for clinical severity, a moderate score for functional impairment, and a moderate score for service use. If the classification system fails to account for characteristics of some patients that lead to higher costs for their care, patients with those characteristics could be less financially attractive compared to others in the same payment group.

The three domain scores are combined to determine patients' home health resource group (HHRG). A total of 80 HHRGs encompass every possible combination of domain scores. Each HHRG is given a weight to reflect the expected costliness of patients in that group relative to patients in other HHRGs. The base payment amount is multiplied by the HHRG weight to match the payment amount for the episode with the anticipated needs of the patient. Thus, episodes for patients with greater needs for care receive a higher payment than episodes for patients with fewer needs.

The process for selecting the OASIS items to include in the HHRG classification system "was not limited to statistical criteria for predictive accuracy, but also included qualitative criteria relating to policy objectives, incentives to provide good care, robustness against gaming, apparent item subjectivity, and administrative feasibility" (Goldberg et al. 1999). Goldberg's research suggested that the model predicted about 32 percent of resource use. Even though some additional OASIS items might have increased the predictive power of the system, the designers avoided items that clinicians felt were too subjective—such as cognitive impairment—and those with potential adverse policy implications—such as the presence of a caregiver. ■

beneficiaries who need part-time or intermittent skilled care to treat their illness or injury and who are homebound, that is, unable to leave their homes without considerable effort. Patients who need full-time skilled nursing care over an extended period of time generally would not qualify for Medicare home health benefits (CMS 2001), though there is no exclusion of coverage for beneficiaries with chronic illnesses. However, using these eligibility criteria to determine coverage leaves a great deal open to interpretation. Regional fiscal intermediaries make individual coverage decisions that contribute to variation across the country. Coverage interpretations have also varied over time. Initially, beneficiaries' need for care had to be part-time *and* intermittent to qualify; a subsequent judicial review interpreted the criteria as part-time *or* intermittent, thus allowing a much larger number of beneficiaries to qualify.[3]

The lack of definition and clinical guidance for this benefit makes it difficult to interpret some of the indicators we use to assess payment adequacy, especially access and quality. How do we know whether beneficiaries have appropriate access when it is not clear who among them require the service? How do we know whether beneficiaries receive the right service without clinical guidelines? Establishing clear eligibility and coverage guidelines in statute (MedPAC 1999) and pursuing the research agenda to develop clinical guidelines (MedPAC 2000) are earlier Commission recommendations that still need to be addressed. In the interim, some ambiguities will continue in any assessment of this benefit.

Are Medicare payments adequate in 2004?

The base payment is adequate, though the system may require refinement to more accurately match payments and costs for some types of beneficiaries. This year, we find that access to care is good for most beneficiaries, although some types of beneficiaries may have better access than others.[4] We also observe a slight increase in the number of home health agencies (HHAs), steady visit volume per episode, and a large, positive aggregate margin. This section analyzes all of these findings to determine whether the base payment is adequate.

Beneficiaries' access to care

We have three questions about access to care:

- Do communities have providers?
- Can beneficiaries obtain care?
- Can beneficiaries obtain appropriate care?

In this subsection we have indications of the answers to the first two questions. Because we do not have definitive clinical practice standards, we cannot determine whether beneficiaries received the right process of care. However, we can measure outcomes of care (e.g., Did patients' ability to walk improve? Did their pain decrease?). Good outcomes should indicate whether beneficiaries have obtained appropriate care. Our discussion of outcomes follows in the "Changes in the quality of care" subsection of this chapter.

Most communities have a Medicare-certified home health agency. Ninety-nine percent of all Medicare beneficiaries live in an area that was served by at least one home health agency in 2003. Ninety-seven percent of beneficiaries live in an area that was served by more than one agency; thus, most beneficiaries had a choice among multiple providers. This evidence suggests that there are no large, populated areas of the country that HHAs refuse to serve.[5]

Most beneficiaries can obtain care when they seek it. Nearly 90 percent of the beneficiaries surveyed about their experiences in 2000 reported that they had little or no problem with accessing home health services. That percentage remained essentially the same over the three most recent years (Table 3D-1).

TABLE 3D-1

Most beneficiaries had no problem accessing home health services, 2000–2002

	2000	2001	2002
Did you experience a problem?			
No problem	76%	74%	76%
A small problem	13	13	13
A big problem	11	12	12*

Note: Columns do not total 100 percent due to rounding.
*The difference between 2000 and 2002 is significant at the P<.05 level.

Source: 2003 Consumer Assessment of Health Plans Survey (CAHPS) data from CMS.

This measure is probably indicative of the access to care for beneficiaries, though it has strengths and weaknesses. It is a strong indicator because the survey includes all beneficiaries who sought care, including those who acquired it and those who did not. Also, the question is not restricted to only those beneficiaries who sought care following hospitalization. However, the survey cannot differentiate beneficiaries who are eligible for the home health benefit from those who are not, and who for that reason had trouble obtaining care. The question of eligibility of the respondents is a limitation of any beneficiary survey on the home health benefit.

What is the implication of these indicators?

At this stage in our analysis, we are focused on the adequacy of the aggregate payment to decide whether to change the base payment. The comprehensive geographic coverage and low rate of access problems indicate that access for most beneficiaries is good. Thus, we conclude that aggregate payments are at least adequate to induce providers to serve almost every community and most eligible beneficiaries who seek care.

In contrast to the good access that most beneficiaries experience, some types of beneficiaries may experience problems. Because these beneficiaries may be disadvantaged by the incentives of the system, raising the base payment is not likely to improve access. However, refinements to the payment system may improve payment accuracy and thus increase the willingness of agencies to serve those types of beneficiaries. We discuss this issue further in the section "Should the prospective payment system change?"

Changes in the supply of home health agencies

Over the past 10 years the number of home health agencies in the program has risen and fallen dramatically. Under the earlier cost-based payment system, hundreds of agencies entered the Medicare program; in 1996, agency entry outnumbered agency exit three to one. At the peak in 1997, more than 10,000 agencies were certified. The trend switched under the interim payment system (IPS, a precursor to the PPS) that began in 1997. In 1999, exiting agencies outnumbered those entering by eight to one. In the years since the implementation of the PPS in 2000, the number of agencies has remained basically steady at about 7,000. Between October 1, 2003 and October 1, 2004, there were about 3 entries for each exit, which would suggest an increase in the number of agencies over the past year (though some "entries" could be existing branch offices with new provider numbers).

The composition of the market has not changed recently. The proportion of freestanding and hospital-based agencies and agencies by type of control (proprietary, voluntary, or government) has remained about the same over the past five years (Table 3D-2). The proportion of agencies located in urban or rural areas has shifted only slightly. The fact that the number of agencies has been volatile but the composition has been stable suggests that no one of these groups was particularly affected by developments over this period.

TABLE 3D-2

The mix of home health agencies has not changed

	1998	2000	2002
Total agencies	9,284	7,317	6,888
Freestanding	70%	67%	71%
Facility-based	30	33	29
Urban	68	65	66
Rural	32	35	34
Proprietary	55	49	52
Voluntary	31	35	34
Government	14	16	15

Note: Subgroups do not total 100 percent due to rounding. Facility-based agencies include those based in a hospital, skilled nursing facility, or rehabilitation facility.

Source: 1998, 2000, and 2002 Provider of Services files from CMS.

The number of HHAs is not an indicator of the capacity of the system. Agencies range in size from very small HHAs serving fewer than 100 beneficiaries annually to very large ones serving more than 5,000 beneficiaries in a year. Also, the flexible structure of a home health agency does not fit the typical concept of capacity. HHAs are not restricted by bed size or other physical plant considerations (e.g., number of exam rooms, operating rooms). Even the number of employees is not a capacity measure, because a home health agency need only provide one type of service to its patients using its own employees. Many HHAs can and do use contracted therapists, aides, or nurses to meet their patients' additional needs.

Furthermore, the implications for payment adequacy of the current rate of exit and entry should not be overdrawn. Exits from the program seem strongly correlated to the implementation of the IPS, though some of those exits were involuntary and may be more closely related to efforts to remove fraudulent or abusive providers and less related to costs and payments. Comparing entry pre- and post-PPS may be misleading because the PPS may favor larger agencies with the ability to average profit and loss over a large and varied patient population. Some entries to the program may have been prevented or delayed by state regulations that limit the number of participating agencies, such as certificate of need regulations. Finally, starting a home health agency may be more expensive than it was in the past due to tighter financial standards and greater need for computerization to comply with the patient data collection requirements implemented in 1999.

Changes in the volume of services

The historically rapid changes in volume have slowed recently. Between calendar years 1997 and 2000, home health volume changed in response to program integrity activities, eligibility changes, and new payment systems (the IPS and PPS). But from 2001 through the first half of 2003, the volume began to stabilize; during that time, the number of episodes per beneficiary, visits per episode, average length of stay, and mix of visits remained fairly steady.

The changes in volume were indicative of the changing product of home health. Medicare home health after the IPS and PPS involved less of the maintenance of chronically ill or disabled people over time at low intensity and more recovery from an acute illness or injury over a

short period of time with a concentration on therapy. Because current payments are based on production costs that were measured before much of the change in the home health product occurred, current payments may no longer be in line with costs.

In 2001 and 2002, the average number of episodes per beneficiary remained at 1.5. Over the same period, the number of visits per episode declined 1 percent from 18.4 to 18.2. In the past, the number of visits per episode declined more rapidly. In 1997, home health users, on average, received 36 visits in 60 days. In 1999, that number dropped to 29 visits.

The average length of stay (LOS) of home health patients has also remained fairly steady, increasing slightly from 2001 to 2002. The LOS measures the number of days between the day beneficiaries receive their first home health visit and the day they are discharged from treatment.[6] Unlike patients in other settings (e.g., acute care hospitals, skilled nursing facilities), home health patients rarely receive visits on every day during their stay; on some days patients may receive more than one visit. The home health LOS measures the duration of the observation, evaluation, and treatment of the patient's condition. In 1997, the average LOS was 106 days; by 1999, that number had fallen to 69 (McCall et al. 2001).

The mix of visit types changed substantially after the implementation of the PPS and changed only slightly since then (Table 3D-3). Home health under the PPS after October 2000 has a greater concentration of therapy compared with the payment systems that preceded the PPS. In 1997, the prevailing pattern was more typical of maintaining consistently ill or disabled patients in their homes over a long period of time, with much of the service provided by home health aides.

One aspect of home health services that surprisingly has not changed since the beginning of the PPS is the provision of very short-duration care. In 1997, episodes with fewer than five visits accounted for about 15 percent of all episodes. In the first six months of 2003, episodes of care consisting of four or fewer visits (LUPA) were still 14 percent of all episodes. Because of strong incentives in the payment system to provide enough visits to avoid LUPA payments, CMS predicted that LUPAs would dwindle to 5 percent of all episodes under prospective payment. HHAs that make at least five visits qualify for an episode payment and avoid the LUPA; even the highest LUPA payments are much lower than the lowest episode payment.

This section has discussed three home health indicators that suggest that the volume of services and the nature of the home health product has begun to stabilize after a period of rapid change. The persistence of LUPA episodes suggests that one widely anticipated behavioral response to the PPS has not yet occurred. Otherwise, HHAs have responded predictably to the incentives of the new payment system.

TABLE 3D-3

Mix of home health visits changed after the prospective payment system started

	Pre-PPS			Post-PPS	
Type of visit	**1997**	**1998**	**1999**	**2001**	**2002**
Therapy	9%	11%	15%	25%	26%
Home health aide	49	42	35	24	23
Skilled nurse	41	45	48	50	51

Note: The prospective payment system (PPS) began in October 2000. Columns do not sum to 100 percent because data were not available for all visit types.

Source: Pre-PPS CMS analysis of the National Claims History file; post-PPS MedPAC analysis of 5 percent Standard Analytic File.

Changes in the quality of care

Patients who obtained home care in 2002 seemed to receive the same quality of care—when measured in terms of their outcomes—as patients in 1999 did before the implementation of the PPS, even though the product has changed. CMS, the General Accounting Office (GAO), and others have stated that monitoring the outcomes of care would be especially important for this sector following the implementation of the PPS because of incentives in the payment system to alter the product (CMS 1999, GAO 2000). Also, because the site of care is patients' homes, Medicare can do very little to set standards for patients' environments.

All prospective payment systems have incentives for stinting on the amount of care delivered to beneficiaries because the payment is based largely upon patients' conditions rather than the amount of service they receive. However, the somewhat ambiguous definition of the benefit and the large bundle (60 days' time and a broad range of services) could provide greater opportunities for stinting in this setting than in others.

MedPAC contracted with Outcome Concept Systems to use their single score of quality to develop a national picture of whether patients' health was generally improving, stabilizing, or declining. The measure combined several indicators of clinical and functional health, as well as adverse events such as an unplanned hospitalization. We chose this measure because it:

- is based on objective measures of changes in patients' status.
- measures outcomes that providers can realistically affect.
- meets criteria developed by the Agency for Healthcare Research and Quality (AHRQ) and CMS for quality measurement.
- is accepted by many providers as a meaningful measure.

Because of our concern about possible changes in the rates of adverse events, we included indicators for emergent care or unplanned hospitalizations when they followed one of four events: an injury caused by a fall or accident at home; a wound infection, deteriorating wound status, or a new ulcer; improper medication administration; or uncontrolled diabetes. We applied this method to all of the start-of-care and discharge patient assessments. The patients were predominantly Medicare; we included all patients that received care from Medicare-certified agencies, whether Medicare was the primary payer, the secondary payer, or whether Medicaid paid for the care. We included Medicaid-paid care because the patient was often a Medicare beneficiary as well and we wanted to capture the quality of the providers on the whole, in a way that was consistent with other measures.[7] We compared the score for 1999 with the score for 2002 to assess the quality of care before and after the implementation of the PPS.[8]

Scoring outcomes for home health is very new; we do not have a context by which to judge what the "right" score is. However, these scores provide a baseline and allow comparisons over time. The median score for this quality index was 0.70 in both periods.[9] The average outcome score for all patients in 1999 was 0.63; in 2002, the average score rose slightly to 0.68 as the standard deviation narrowed. The severity of patients' conditions at the start of care was higher in 2002 than in 1999, suggesting that stable quality was not achieved by excluding patients with severe illness or functional limitations.[10] Because we used all records for all patients to derive these scores, we conclude that the differences between years are not caused by sampling error.

We could conclude that quality has remained stable at a good level because in 2002, for every clinical and functional indicator (e.g., shortness of breath, ability to move around), at least twice as many patients improved as declined. We also see a trend of improvement between the two years: emergent care and unplanned hospitalizations declined from 1999 to 2002. However, room to improve remained on some measures. The number of patients who did improve as a percentage of those who could improve was less than 30 percent for 5 out of 20 measures in 2002.

The stability of this score has some implications for our assessment of payment adequacy. It addresses the concern that as agencies reduced the number of visits they provided, quality would decline. Instead, the decline in the number of visits per episode is concurrent with stable quality.

Nonetheless, a single, national score gives us only a broad picture and not a picture of the changes that may be occurring among certain patient populations or agencies. The score is sensitive to the severity of patients' illness or functional limitations but not sensitive to how difficult patients may be to improve. Providers may have admitted fewer hard-to-improve patients in 2002. Also, the national score could mask very different agency-by-agency trends. For example, the national score would remain the same if poor-quality agencies declined while high-quality ones improved.

Home health agencies' access to capital

Though access to capital may be a meaningful measure of payment adequacy for other health care sectors, it is not informative in the case of home health. Compared with other sectors, home health is not capital intensive. Few home health agencies access capital through publicly-traded shares or public debt. Capital seekers' access to capital appears to be largely determined by their size and the perception of regulatory risk for the industry. Total national health expenditures for home care in 2001 were $33 billion—small compared with $450 billion for hospital care or even $100 billion for nursing homes. The largest publicly traded home care company has only a 2 or 3 percent market share (CMS 2003).

Furthermore, the home care industry's access to capital is not indicative of the adequacy of Medicare's payments

because, while Medicare is a substantial portion of the revenue for those providers who receive Medicare payments, there are many home care entities that receive little or no Medicare payments.[11] In fact, Medicare payments account for less than 30 percent of payments to the home care industry (defined as private-duty nursing, Medicaid home care providers, home infusion companies, and others). Medicaid's share of the total home care industry is nearly equal to Medicare's.

Investment analyst sentiment was generally positive for the publicly traded agencies; however, analysts regarded the sector as risky. CMS's industry report (CMS 2003) and those of four Wall Street firms (Raymond James, J.P.Morgan, Legg Mason, and Jeffries) that analyze the home health sector come to similar conclusions about the industry as a whole:

- Several reports note that Medicare is the highest margin payer in the industry.
- Most expect home health to outperform the Standard & Poor's 500 over the coming year.
- Several analysts cite the Congressional consideration of a patient copayment in Medicare as a significant risk for profitability in the sector.[12]
- Most also note the initiation of legal action (warrants and subpoenas) at several large companies as another source of risk.

A recent report on the largest publicly traded home health agency tends to confirm that the availability of capital and the adequacy of payments are not strongly related. Medicare is the largest payer—43 percent of revenues—at the agency. J.P. Morgan estimated that the company's Medicare margin was between 50 and 60 percent (Ripperger and Bao 2003). Yet, despite this finding of far more than adequate Medicare payments, J.P. Morgan gave the company only its second-highest rating out of a possible three.

Payments and costs for 2004

One method the Commission uses to evaluate the adequacy of current payments is to calculate the relationship between payments and costs. We project current costs and payments by modeling trends from the most recent available data. This year we are using a full set of fiscal year 2001 cost reports and extrapolating trends from 2001 and a partial set of 2002 data.

In modeling 2004 payments and costs, we incorporate policy changes that went into effect between the year of our most recent data—2002—and our target year—2004—as well as those scheduled to be in effect in 2005. For the home health sector, the 2004 estimate includes all the aspects of current law:

- the effect of the so-called "15 percent cut" implemented on October 1, 2002;
- the expiration of the 10 percent rural add-on for services provided to beneficiaries living outside metropolitan areas on April 1, 2003;
- the restart of the rural add-on at 5 percent on April 1, 2004;
- the full market basket increase in October 2003; and
- the decrease in the base rate of 0.8 in April 2004.

We did not include the January 2005 update of market basket minus 0.8 percent in the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA) because that update is one of the questions at hand.

Hospital-based agencies are not included in our estimate of the aggregate margin for home health. In 2001, the aggregate margin for hospital-based agencies was 2.5 percent. The wide divergence of margins between hospital-based and freestanding HHAs cannot be accounted for by factors that could cause efficient providers' margins to differ.

- There are no payment differentials based on whether the agency is freestanding or hospital-based. Hospital-based agencies are about the same size, on average, as the freestanding ones and receive about the same amount of payment per agency on average.
- There is no evidence that hospital-based agencies produce a different product from freestanding agencies: The case mix is similar and the average number of visits per episode is essentially the same. When we compare the average number of visits per episode by visit type, the similarity persists.
- More hospital-based agencies are rural than freestanding agencies, 48 percent versus 35 percent respectively; however, we know that rural and urban margins are very close (Table 3D-4).

TABLE 3D-4 **Freestanding home health Medicare margin, by type of agency, 2001 and estimated 2004**

Type of agency	2001	2004
All agencies	16.2	16.8
Location of agency		
Urban	16.0	16.9
Rural	17.0	16.3
Caseload		
Urban	16.2	17.3
Mixed	15.3	15.1
Rural	18.7	17.8
Type of control		
Voluntary	15.0	15.6
Private	17.4	18.0
Government	10.7	11.3
Volume		
Very small (20th percentile)	11.4	12.1
Small (20th—40th)	15.0	15.6
Medium (40th—60th)	14.8	15.4
Large (60th—80th)	17.9	18.5
Very large (80th)	16.3	16.9

Source: MedPAC analysis of Medicare Cost Report file from CMS.

- Moreover, since care is delivered in the patient's home, the location of the agency has no relation to the site of care.

Hospital cost allocation or differences in efficiency would seem to be likely explanations for the differences in margins.

Our model generates a current, aggregate margin of 16.8 in 2004, a slight improvement since the first full year of the PPS (Table 3D-4).[13] This margin indicates that the payments are more than adequate to cover the costs of caring for Medicare beneficiaries. Few agencies are doing poorly in terms of their Medicare costs and payments: The distribution of margins from 2001 indicates that 80 percent of agencies had positive margins, and agencies with positive margins provided 82 percent of all episodes to beneficiaries.

Though the aggregate margin is high, some agencies will fare better than others in 2004. The similar margins of urban and rural agencies are, in part, the result of a distributive policy already in the system—the additional payments for agencies serving rural beneficiaries. We see some variation in the margins when we look at agencies by type of control (voluntary, private, and government). There also appears to be a relation between the size of the agency and its financial performance. Though large and small agencies do well or poorly according to their own circumstances, larger ones have higher margins. The effect of size appears to diminish somewhat among very large agencies, as their margins are slightly lower than the margins of agencies that are slightly smaller.

The distribution of margins in 2001 (the year from which we are projecting 2004 margins) also leads us to the conclusion that some agencies are doing better than others. The median agency had a margin of 16.7 in 2001, while the agency at the 10th percentile of the distribution had a margin of –16.5. At the other end of the distribution, the agency at the 75th percentile had a margin of 28.9 and at the 90th percentile the margin was 40.2.

How should Medicare payments change in 2005?

Do we think that the adequacy of payments will change over the coming year? We examine the market basket, changes in the product, and productivity to determine how costs may change. We also examine scientific and technical advances that could diffuse over the coming year and determine whether an adjustment is needed.

The market basket increase for home health for 2005 is currently estimated at 3.1. The market basket reflects the increased prices of transportation, nursing wages, and other inputs that affect the cost of providing an episode of care.

Even though input prices have been rising over the past several years, the cost of producing an episode of care has fallen over the past several years because of product change and productivity. In 2000, the home health product changed because the unit of payment changed from visits to episodes. But more than the unit of payment changed: in 2003 the content of the home health product is different from that in 1997, 1999, or even 2000. It consists of fewer visits, shorter stays, and more therapy with less aide service. Although the product is changing, the outcomes are staying the same because the changes in the product have been accompanied by stable quality.

We cannot disentangle the separate impacts of changing product and productivity, but we have estimates of their combined effect. Costs per episode fell by 16 percent from 1999 to 2001 as the number of visits per episode was reduced by half. The rate of decline in the number of visits per episode continued at a much slower pace between 2001 and 2002, declining only by 1 percent. Our 2002 sample of cost reports indicates that costs per episode declined 1 percent between 2001 and 2002, even as input prices increased. Based on this evidence, we have projected that costs will remain the same between 2002 and 2004. If costs were to increase at the full rate suggested by the market basket, the estimated margin would still indicate that Medicare's payments more than cover the costs of providing services to Medicare beneficiaries.

In the future, product change and productivity growth could result from scientific and technological advances that lower costs as well as enhance quality. For example, nurses and therapists can increase their performance with more electronics in the home by:

- monitoring some patients with digital or audio signals rather than visits,
- performing some diagnostic procedures in the home,
- producing electronic records of patients' conditions and care notes at the point of care, and
- accessing patient data and sharing data with others on the Internet (Tweed 2003).

The increasing use of new therapies for wound care could also improve outcomes and enhance productivity. Vacuum pressure and heat can heal difficult wounds faster and more completely than previously available therapies. These therapies can also decrease the number of nursing visits necessary to treat the wound.

Additional payment is not necessary to promote the adoption of these advances because the home health PPS provides an incentive and reward for adopting technologies that reduce the number of visits necessary to deliver care. The PPS payment is based on the condition of the patient rather than the number of visits; thus, technology that reduces visits generates its own financial return. A few providers have already adopted these scientific and technological advances. We expect that computerization and new wound therapies will continue to proliferate, albeit slowly.

RECOMMENDATION 3D-1

The Congress should eliminate the update to payment rates for home health services for 2005.

RATIONALE 3D-1

Most beneficiaries have good access to care and our evidence suggests that quality has remained steady. Agencies are not leaving Medicare rapidly, nor has the number of agencies substantially increased. The aggregate margin for home health agencies continues to be very high, suggesting that there is more than enough money in the system to cover the costs of providing home health services to Medicare beneficiaries. The effects of product change and productivity will continue to offset increasing input prices; margins will remain high over the coming year without an increase to the base rate.

IMPLICATIONS 3D-1

Spending

- Because this recommendation provides no update to payments for home health services, whereas current law updates payments for these services by the market basket index minus 0.8, we expect this provision to reduce Medicare spending relative to current law by between $200 million and $600 million for 2005 and between $1 billion and $5 billion over 5 years.

Beneficiary and provider

- Because of the current and projected adequacy of payments, this recommendation should have no impact on beneficiaries or providers.

Should the prospective payment system change?

Despite the apparent adequacy of payments in the current year and in the coming year, some types of beneficiaries may have worse access today than in the recent past. The decline in use from 1996 to 2000 was the expected outcome of efforts to reduce fraud and abuse, changes in eligibility, and changes in the incentives of the payment system. Though expected, the decline remains a source of some concern for some policymakers. The disproportionate decline in use among beneficiaries with chronic conditions and beneficiaries without a caregiver in the years preceding the PPS could be a signal that some eligible beneficiaries have been excluded from the benefit.

While the PPS addressed many issues of the preceding payment system, we should carefully assess elements of this current payment system. Specifically, the factors used to determine the episode payment for a particular patient—the case-mix system—or the adjustment used to pay for particularly expensive patients may cause some agencies to prefer other patients whose care is more likely to be profitable. Payment system refinements could ameliorate any tendencies among providers to favor certain types of beneficiaries more than others.

What caused the decline in use between 1996 and 2000?

In 1996, 3.5 million beneficiaries used the home health benefit. In 2000, the number fell to 2.5 million users. Three substantial forces reduced the number of home health users:

- the interim payment system,
- changes in eligibility for the benefit, and
- enforcement of program integrity standards.

When the Congress changed the law in the BBA in 1997 and the Health Care Financing Administration implemented the interim system, the new structure favored short-term care over long-term, maintenance care. Under IPS, agencies were paid the lesser of three amounts: actual costs, aggregate costs per beneficiary subject to an agency-specific limit, or aggregate costs per visit subject to an agency-specific limit. This gave agencies an incentive to serve patients who needed few visits and to deliver the types of visits they could produce at costs below the limits. There were no outlier payments for high cost patients. Agencies reported that they tried to avoid less profitable patients under the IPS (Stoner et al. 1999).

Changing eligibility also had an impact on use. In 1997, the BBA clarified the acceptable frequency of visits and removed the drawing of blood as a qualifying service. Agencies reported that changing the eligibility criteria to exclude the drawing of blood decreased the number of users "significantly" in at least six high-use states (GAO 1999). By defining the term "part-time or intermittent," the BBA narrowed its coverage of very frequent or nearly full-time care from 56 hours per week of nursing and home health aide service to 35 hours per week (Komisar and Feder 1998). Fifteen percent of the users in 1996 had more than 150 visits in the year; the decline in the average visits per user from 1997 to 2001 suggests that such heavy use is no longer common.

The enforcement of program integrity standards also changed the volume of visits and users. The Secretary initiated Operation Restore Trust, which scrutinized Medicare home health, prompted the involuntary closure of hundreds of agencies that were not in compliance with the program's integrity standards, and established civil liabilities for physicians who knowingly falsely certified the eligibility of a beneficiary. The Secretary found that fraud and abuse was not uncommon during the period of peak use of the benefit. Program integrity activity continues: one of the entities that reviews home health claims for payment has consistently down coded or denied more than 20 percent of reviewed claims.

Did use decline more for some types of beneficiaries than others?

Researchers have examined the changes in home health from the peak year in 1996 until the implementation of the PPS in 2000 (McCall et al. 2001). Although the differences were not large, many found evidence that some groups of beneficiaries experienced greater declines than others, such as beneficiaries:

- in high-use states,
- with Medicaid buy-in,
- in rural areas, and
- without care givers.

MedPAC conducted two studies of this issue: the first to explore trends from 1996 to 2000 and the second to determine whether data from the first year following the implementation of the PPS showed similar trends.

We found mixed results in our first study.[14] Two types of particularly vulnerable patients were not disproportionately excluded from the home health benefit during the period of declining use. Our comparison of surveys of home health agencies about their patients in 1996 and 2000 showed that both the average age and the functional disability of patients increased. These trends suggest that the older old, and the functionally limited were still using the benefit after the period of decline. On the other hand, we found that the proportion of users who did not have a caregiver fell over this period. The latter finding is consistent with a decline in the number of home health aide visits provided by home health agencies and may suggest that access to home health for such patients has lessened.

In our second study, we found declines in use among every type of beneficiary (e.g., hospitalized or nonhospitalized, chronic diagnosis or acute diagnosis) between 1996, the peak year of use of the benefit, and 2001, the first year of the PPS. However, the declines were not the same magnitude for every type of beneficiary. Those with the clearest need for the benefit (many or most of the beneficiaries of this type used home health) had the smallest decline. For example, beneficiaries who went to the hospital and had a cardiac catheterization used home health 38 percent of the time in 1996 and 31 percent in 2001. Those with a less clear need (some beneficiaries of this type used home health but most did not) had greater declines. For example, those hospitalized with chronic obstructive pulmonary disease used home health 25 percent of the time in 1996 and 12 percent in 2001. We will continue to monitor use to determine whether the pattern changes as agencies adjust to the PPS.

The incentives of the current system

Although not as drastic as its predecessor system, the PPS still favors short-term recovery care over long-term, maintenance care. The PPS case-mix system may make beneficiaries with little or no need for therapy and beneficiaries without their own caregiver less financially attractive. The PPS case-mix system assigns higher weights, and thus higher payments, to patients with needs for therapy. This structure would make lower payments for care of beneficiaries who have chronic conditions, if those conditions preclude or do not require therapy. Whether the payments are lower but still adequate is not clear. When the payment system was implemented, the gap in payments between a therapy patient and a nontherapy patient—with precisely the same clinical and functional needs—was $450. Increases in the base payment since that time have widened the payment gap.

The case-mix adjustment system is neutral toward the presence or absence of a caregiver in patients' homes and the adequacy of patients' environments. This neutrality was a conscious decision on the part of the Medicare program: it did not wish to differentiate the benefit available to beneficiaries based on their socioeconomic status. This very neutrality, however, may cause some agencies to be reluctant to admit some beneficiaries without caregivers or those with challenging home environments because these patients may require more services without a compensating higher payment.

Home health agencies may still be serving fewer beneficiaries under the PPS than they did in 1996 because of eligibility criteria or program integrity activities. If so, then neither increasing the base payment nor restructuring the system would increase use. Alternatively, agencies may be avoiding some types of patients because they anticipate a substantial loss on those patients or may be selecting patients in more profitable case-mix groups. A study of the outlier policy that is intended to mitigate agency losses for particularly expensive patients may indicate that HHAs are avoiding high-cost patients. MedPAC will study the relative profitability by case-mix group to determine whether some types of patients are more profitable than others and could suggest refinements to the case-mix system.

Every prospective payment system is built on the assumption that some patients will be more profitable than others and that aggregate payments will cover aggregate costs. Otherwise we would have a cost-based system. The fact that both high and low volume agencies have high and low margins suggests that the principle of averaging patient costs is actually functioning rather well in this system. It is possible, though, that some agencies—regardless of size—are choosing profitable patients and avoiding less profitable ones.

MedPAC plans to examine the need for refinements to the payment system and other aspects of the home health benefit. We will:

- examine the relationship between case mix and financial performance,
- analyze demonstrations that broaden the definition of homebound and substitute adult day health center services for in-home home health,
- extend our analysis of the characteristics of home health users, and
- study the outlier policy.

We will be undertaking a study of case mix and financial performance as requested by the Congress. We will examine margins by HHAs to determine whether agencies are systematically avoiding chronic care cases or high cost patients.

We will also closely watch two upcoming home health demonstrations at CMS. These demonstrations test two changes to the homebound definition to determine whether they result in substantially better access for beneficiaries, higher spending in home health, or savings elsewhere in the system. One demonstration will allow severely

disabled, but not homebound, beneficiaries to use home health services. The other will allow beneficiaries to receive some home health services in an adult day care center.

By extending our analysis of the characteristics of the users of home health, we can continue to monitor the impact of the changes on the decline in the total number of users and the adequacy of the case-mix adjustment. Comparing characteristics of users and nonusers—such as their Medicaid status—may help us determine whether the decline in the use of home health services has led to the inappropriate use of other services. Other characteristics, such as cognitive impairment or mental illness, may be related to patients' needs for service; indicators for these conditions are included in the patient assessment but not included in the case-mix adjuster.

In addition to MedPAC's work, these steps are also necessary:

- The Office of Inspector General should continue to monitor access to care for beneficiaries following hospitalization.
- CMS should continue the Consumer Assessment of Health Plans Survey (CAHPS) as an important part of monitoring beneficiaries' ability to access services with little or no problem.
- The Secretary should continue efforts to identify similar patients across settings and compare their use of services.

RECOMMENDATION 3D-2

The Secretary should continue to monitor access to care, the impact of the payment system on patient selection, and the use of services across post-acute care settings.

RATIONALE 3D-2

Although access for most beneficiaries is good, some types of beneficiaries may be experiencing problems. Use by some types of beneficiaries may have declined because of efforts to reduce fraud and abuse or changes to eligibility; clearly, no increase to the base payment is necessary to address such declines. However, some other types of beneficiaries may be disadvantaged by the new payment system. Even for them, increasing the base payment will not address their problems. Refinements to the payment system may be needed to improve access.

IMPLICATIONS 3D-2

Spending

- This recommendation should not affect Medicare benefit spending.

Beneficiary and provider

- This recommendation will have no immediate impact on beneficiaries or providers. ■

Endnotes

1 Other home care services, such as personal care or meal preparation, may be covered in some cases by Medicaid or other payers but are not included as part of the Medicare benefit.

2 Operation Restore Trust began as a demonstration project in 1995 in California, Florida, Illinois, New York, and Texas, and was expanded to additional states in 1997. It included skilled nursing facilities and other sectors of Medicare in addition to home health. Activities were focused on providers with suspect patterns of utilization.

3 The case was Duggan v. Bowen, 1988.

4 For the purposes of home health payments, fiscal year 2004 began on October 1, 2003. On January 1, 2004, the MMA shifted the payment cycle from this fiscal cycle to a calendar year cycle. However, in this section, "year" refers to fiscal year unless otherwise noted.

5 Our analysis is based on a new database of agency service areas collected and maintained in CMS's "Home Care Compare" database. The service areas are the postal ZIP codes where an agency provided care to at least one beneficiary in the last 12 months. We used a snapshot of this database as of May 1, 2003, to determine the geographic access area. This measure could differ from estimates that rely upon the licenses or certifications of agencies to determine served areas, because a license or certification does not guarantee that the agency ever actually served a beneficiary in the area (e.g. some states give HHAs state-wide licenses even though they only operate in several counties). Also, the licensure/certification measure relies upon counties as its base unit; the ZIP codes in this database are smaller than counties in most cases, but some are actually larger than counties. Using either ZIPs or counties to describe service areas will overstate the real service area of agencies that are willing to serve beneficiaries in only one part of a ZIP or county.

6 Under the PPS, a beneficiary may receive multiple 60-day episodes of home health services, as long as they remain eligible for the benefit. Thus, a single stay is the amount of time between the start-of-care and discharge; it may be one 60-day payment episode or several payment episodes.

7 Both AHRQ's National Healthcare Quality Report and CMS's Home Care Compare system use the Medicare and Medicaid populations to measure the quality of home health agencies.

8 Agencies were not required to collect OASIS until August 1, 1999. To ensure the comparability of our sample, we compared cases from August 1, 2002 through December 31, 2002 to our 1999 sample as well cases for all of calendar year 2002 and found the same result.

9 This system scores each full episode of care based upon the average points assigned for the episode. Points are assigned for each outcome that had the potential to improve or decline (e.g. shortness of breath, ability to walk, ability to manage oral medications). Two points are assigned to an improvement, 1 point to a stabilization, and –1 point to a decline. The score is the average of the points assigned for each outcome (e.g. improved breathing would receive a 2, decreased ability to walk a –1, stabilization in ability to manage oral medications a 1, for an average score of 0.66). The score is decreased by 1 point for each use of emergent care or unplanned hospitalization that fits the criteria discussed above. No points are assigned for those outcomes that did not have the potential to improve or decline (e.g. if patients had no injectable medications when they were admitted to home care, then their ability to manage injectable medications did not have the potential to improve or decline). The national score is the average of all episode scores for that year.

10 Patient severity may have been assessed inconsistently in 1999 and 2002. Because payments were linked to the severity score in the intervening year, less-severe patients may have been rated as more severe in 2002 than they were in 1999.

11 Medicare's share of patients among those agencies that are Medicare certified is substantial. The caseload of the average Medicare-certified agency is 80 percent Medicare fee-for-service or Medicare+Choice (Outcome Concept Systems 2002). Medicaid recipients and persons with private pay sources each have about 10 percent of the remainder of the caseload of Medicare certified agencies.

12 The copayment was not implemented in the MMA.

13 The aggregate margin is the sum of all payments to all agencies, less the sum of all costs of all agencies, divided by the sum of all payments to all agencies.

14 MedPAC analysis of The National Home and Hospice Care Survey, a nationally representative sample of home care patients, conducted by the National Center for Health Statistics. This work extends the work of Murkofsky and colleagues (2003).

References

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2003. *Health care industry market update: Home health.* Baltimore: CMS. September 22.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2001. *Health insurance for the aged: Home health agency manual*. Section 205.1. Baltimore: CMS. December.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 1999. *Prospective payment system for home health agencies*. Proposed rule, 42 CFR parts 409, 410, 411. October 28.

General Accounting Office. 2000. *Medicare home health: Prospective payment system will need refinement as data become available*. no. HEHS–00–9. Washington, DC: GAO. April.

General Accounting Office. 1999. *Medicare home health agencies closures continue, with little evidence beneficiary access is impaired*. no. HEHS–99–120. Washington, DC: GAO. May.

Goldberg, H., D. Delargy, R. Schmitz, et al. 1999. *Case mix adjustment for a national home health prospective payment system: Second interim report*. Cambridge, MA: Abt Associates, Inc.

Komisar, H., and J. Feder. 1998. *The Balanced Budget Act of 1997: Effect on Medicare's home health benefit and beneficiaries who need long-term care*. Washington, DC: Georgetown University, Institute for Health Care Research and Policy. February.

McCall, N., H. Komisar, A. Petersons, et al. 2001. Medicare home health before and after the BBA. *Health Affairs*, vol. 20, no. 3, (May–June): 189–198.

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

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

Medicare Payment Advisory Commission. 1998. *Report to the Congress: Context for a changing Medicare program*. Washington, DC: MedPAC. June.

Murkofsky, R., R. Phillips, E. McCarthy, et al. 2003. Length of stay in home care before and after the 1997 Balanced Budget Act. *Journal of the American Medical Association,* vol. 289, no. 21 (June): 2841–2848.

Outcome Concept Systems, Inc. 2002. *PPS & patient outcomes: A year in review*. Seattle, WA: Outcome Concept Systems, Inc.

Ripperger, M., and J. Bao. 2003. *Gentiva health services: An emerging leader in home care*. New York, NY: J. P. Morgan. July 14.

Stoner, D., H. Goldberg, G. McCallum-Keeler, et al. 1999. *Medicare Payment Advisory Commission (MedPAC) home health agency survey*. Cambridge, MA: Abt Associates.

Tweed, S. 2003. Seven performance-accelerating technologies that will shape the future of home care. *Home Healthcare Nurse,* vol. 21, no. 10, (October): 647–650.