CHAPTER 8

Home health services

RECOMMENDATIONS

8-1 The Secretary, with the Office of Inspector General, should conduct medical review activities in counties that have aberrant home health utilization. The Secretary should implement the new authorities to suspend payment and the enrollment of new providers if they indicate significant fraud.

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

8-2 The Congress should direct the Secretary to begin a two-year rebasing of home health rates in 2013 and eliminate the market basket update for 2012.

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

8-3 The Secretary should revise the home health case-mix system to rely on patient characteristics to set payment for therapy and nontherapy services and should no longer use the number of therapy visits as a payment factor.

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

8-4 The Congress should direct the Secretary to establish a per episode copay for home health episodes that are not preceded by hospitalization or post-acute care use.

COMMISSIONER VOTES: YES 13 • NO 1 • NOT VOTING 2 • ABSENT 1

(For additional recommendations on improving the home health payment system, see text box on p. 197.)

CHAPTER 8

Home health services

Chapter summary

Home health agencies provide services to beneficiaries who are homebound and need skilled care (nursing or therapy). In 2009, about 3.3 million Medicare beneficiaries received home health services from more than 11,400 home health agencies. Medicare spent $19 billion on home health services in 2009.

Assessment of payment adequacy

The indicators of payment adequacy for home health care are generally positive. The Commission recommends that the Congress eliminate the market basket update for 2012 and direct the Secretary to implement a two-year rebasing of home health rates beginning in 2013. The Commission believes the home health benefit has significant vulnerabilities that need to be addressed urgently, and this chapter recommends policies to improve payment accuracy, establish beneficiary incentives, and strengthen program integrity.

Beneficiaries' access to care—Access to home health care is generally adequate. Ninety-nine percent of beneficiaries live in a ZIP code where a Medicare home health agency operates and 98 percent live in a ZIP code with two or more agencies.

- ***Capacity and supply of providers—***The number of agencies continues to increase, with more than 650 new agencies in 2010. The total number exceeds 11,400, surpassing the peak of 10,917 agencies in 1997. Most new agencies are concentrated in a few states.

In this chapter

- Are Medicare payments adequate in 2011?
- How should Medicare payments change in 2012?

- ***Volume of services*—**The volume of services continues to rise. The average number of episodes per user has increased by 25 percent since 2002. The share of beneficiaries using home health services has increased significantly since 2002.

***Quality of care*—**The Home Health Compare measures for 2010 are similar to those for previous years, showing improvement in the functional measures and mostly unchanged rates of adverse events. However, the Commission believes that supplemental measures of quality that focus on specific conditions are needed to assess home health quality and has a project under way to develop new measures.

***Providers' access to capital*—**According to capital market analysts, the major publicly traded for-profit home health companies have sufficient access to capital markets for their credit needs. For smaller agencies, the significant number of new agencies in 2010 suggests that they have access to capital necessary for start-up.

***Medicare payments and providers' costs*—**In prior years, payments have consistently and substantially exceeded costs in the home health prospective payment system (PPS). Medicare margins for freestanding providers in 2009 were 17.7 percent, which is about equal to the average for the period since the home health PPS was implemented. Two factors have contributed to payments exceeding costs: Fewer services are delivered than is assumed in Medicare's rates, and growth in cost per episode has been lower than what is assumed in the market basket.

Strengthening integrity and incentives for home health

Recent trends in several parts of the nation suggest that fraud has become a significant concern in the home health benefit. The Commission recommends that the Secretary and the Office of Inspector General review areas with aberrant home health utilization and that the Secretary suspend enrollment and payment in areas with widespread fraud.

The Commission believes the current home health payment system is flawed and creates incentives for patient selection. Analysis by the Commission and the Urban Institute suggests that the current case-mix system may, in effect, overvalue therapy services and undervalue nontherapy services. The Commission recommends that the Secretary implement a revised payment system that addresses these flaws.

The lack of cost sharing in Medicare for home health services is unusual, as most services in Medicare's traditional fee-for-service program include some form of beneficiary liability. Adding a cost-sharing requirement would engage beneficiaries in assessing the value of home health services. ■

TABLE 8–1 **Changes in supply and utilization of home health care**

				Percent change	
	1997	2000*	2009	1997–2000	2000–2009
Agencies	10,917	7,528	10,961	–31%	46%
Total spending (in billions)	$17.7	$8.5	$18.9	–52	123
Users (in millions)	3.6	2.5	3.3	–31	32
Number of visits per user	72.6	36.8	39.4	–49	7
Percent of FFS beneficiaries who used home health services	10.5%	7.4%	9.4%	–30	27
Number of visits (in millions)	258.2	90.6	129.6	–65	43
Visit type (percent of total)					
Skilled nursing	41%	49%	55%		
Home health aide	48	31	16		
Therapy	10	19	28		
Medical social services	1	1	1		

Note: FFS (fee-for-service).
*Note: Medicare did not pay on a per episode basis before October 2000.

Source: Home health standard analytical file; Health Care Financing Review, Medicare and Medicaid Statistical Supplement, 2002; and Office of the Actuary, CMS.

Background

Medicare home health care consists of skilled nursing, physical therapy, occupational therapy, speech therapy, aide service, and medical social work provided to beneficiaries in their homes. To be eligible for Medicare's home health benefit, beneficiaries must need part-time (fewer than eight hours per day) or intermittent skilled care to treat their illnesses or injuries and must be unable to leave their homes without considerable effort. Medicare requires that a physician certify a patient's eligibility for home health care and that a patient receiving service be under the care of a physician. In contrast to coverage for skilled nursing facility services, Medicare does not require a hospital stay to qualify for home health care. In 2008, about 63 percent of home health episodes were for patients admitted directly from the community; that is, the episode was not preceded by a stay in a hospital or other post-acute care facility. Unlike most services in Medicare, copayment or a deductible is not required for home health services.

Medicare pays for home health care in 60-day episodes. Medicare pays for an episode even if patients complete their course of care and are discharged before 60 days have passed. Payments are adjusted for patient severity by a case-mix system that is based on patients' clinical and functional characteristics and some of the services they use. If a patient needs additional covered home health services at the end of the initial 60-day episode, another episode commences and Medicare pays for an additional episode. (An overview of the home health payment system is available at: http://medpac.gov/documents/MedPAC_Payment_Basics_10_HHA.pdf.)

Use and growth of home health benefit has varied substantially due to changes in coverage and payment policy

Medicare's home health benefit has changed substantially since the 1980s. Dramatic increases in home health utilization and spending in the 1990s prompted increased program integrity actions, refinements to eligibility standards, and replacement of the cost-based payment system with a prospective payment system (PPS) in 2000. Between 1997 and 2000, the number of beneficiaries using home health services fell by about 1 million, and the number of visits fell by 65 percent (Table 8-1). Since implementation of PPS, the number of home health episodes between 2001 and 2009 has risen from 3.9 million to 6.6 million. In 2010, the number of agencies was more than 11,400, higher than the supply at the peak

of spending in 1997. With rapid growth in the number of users and the supply of agencies, the benefit is now reaching utilization levels comparable to 1997, when Medicare last took significant steps to curb growth.

The steep declines in services after 1997 do not appear to have adversely affected the quality of care beneficiaries received; one analysis found that patient satisfaction with home health services was mostly unchanged in this period (McCall et al. 2004, RAND Corporation 2006). An analysis of all the Balanced Budget Act of 1997 (BBA) changes related to post-acute care, including the home health interim payment system (IPS) and changes for other post-acute care sectors, concluded that the rate of adverse events generally improved or did not worsen when IPS was in effect (McCall et al. 2003). A study by the Commission also concluded that the quality of care did not decline between 1997 and implementation of PPS (Medicare Payment Advisory Commission 2004). The similarity in quality of care under IPS and PPS suggests that the payment reductions in the BBA led agencies to reduce costs without compromising patient care.

Home health agencies' (HHAs') high Medicare margins, averaging 17.4 percent between 2001 and 2008, have likely encouraged the entry of new HHAs, as the number of agencies participating in Medicare has increased by hundreds a year since 2001, and most beneficiaries live in an area served by multiple agencies. In recent health care reform legislation, the Patient Protection and Affordable Care Act of 2010 (PPACA) included several reductions intended to bring payments more in line with costs:

- ***2011—***The base rate for a home health episode is reduced by 2.5 percent, and the market basket update is reduced by 1 percent.
- ***2012 and 2013—***The market basket update is reduced by 1 percent.
- ***2014 to 2017—***A phased rebasing of an episode payment is implemented to lower payments to a level equal to the costs of the average episode. The Secretary may lower payments by no more than 3.5 percent a year, for a cumulative reduction in payments of 14 percent by 2016. These reductions will be offset by the payment update for each year (under PPACA, the update in 2015 and following years will be equal to the market basket adjusted for productivity).

Past experience suggests that, in the face of payment reductions, many agencies will be able to adjust their operations to maintain positive financial performance. The experience of 2003, when Medicare implemented a 5 percent reduction to the home health base rate, is illustrative. The effect of this cut was offset by an increase in case-mix values and low annual cost growth of less than 1 percent. With these two factors to offset the reduction in the base rate, average Medicare margins fell by less than 3 percentage points to 15 percent.

Ensuring the appropriate use of home health care is challenging

Policymakers have long struggled to define the role of the home health benefit in Medicare (Benjamin 1993). From the outset, there was a concern that setting too narrow a policy could result in beneficiaries using other, more expensive services, while a policy that was too broad could lead to wasteful or ineffective use of home health care (Feder and Lambrew 1996). Medicare relies on the skilled care and homebound requirements as primary determinants of home health eligibility, but these requirements provide limited guidance.

Home health care can serve as an intermediate level of care for beneficiaries who have difficulty accessing outpatient care or who need intensive assistance with an acute or chronic health problem. For example, beneficiaries returning home after a hospitalization often receive home health care to assist them with the transition. These patients often need help adjusting to or recovering from a recent acute health condition, and in-home nursing visits permit beneficiaries to shorten or avoid post-acute stays at skilled nursing facilities and other higher cost post-acute care providers. Medicare's home health benefit also covers services for beneficiaries who have not been hospitalized, as long as they are homebound and need skilled care.

Medicare's policies for ensuring appropriate use of home health care do not guarantee that services are used in an efficient manner. The broad coverage criteria permit beneficiaries to receive services in the home even when a beneficiary is capable of leaving the home for medical care, which is the case for most beneficiaries. Medicare does not provide any incentives for beneficiaries or providers to consider alternatives to home health care, and beneficiaries, once they qualify, can receive an unlimited number of episodes of care. In addition, the program relies on agencies and physicians to follow program requirements for determining beneficiary needs, but they do not consistently follow Medicare's standards (Cheh et

al. 2007, Office of Inspector General 2001). The variation in following program standards may be one of the factors driving geographic variation in Medicare spending for home health services.

Geographic variability in health care expenditures exists for all sectors, but the variability in spending for home health care is greater than that for other Medicare services. For example, from 2006 through 2008, annual Medicare spending on home health services ranged from $25 per beneficiary in one core-based statistical area (CBSA) to $49 per beneficiary in another CBSA. (These CBSAs were at the 25th and 75th percentiles of the distribution of total price-adjusted and health-status-adjusted Medicare spending.) Though differences in practice patterns likely explain some of this regional variation in home health spending, the extent of the variation was so wide and so concentrated in certain CBSAs that it raised concerns about the integrity of home health services in these areas. For example, price-adjusted and health-status-adjusted home health spending for the McAllen, Texas, area was seven times the national average. Consistent with these spending disparities, some areas account for a disproportionate share of home health spending. For example, in 2008, the five highest spending CBSAs accounted for 20 percent of all price-adjusted and health-status-adjusted home health spending.

Fraud and abuse is a substantial challenge in the home health benefit

Program integrity has always been a significant concern in the home health benefit, and recent developments indicate that fraud is once again a significant problem. Federal authorities are investigating or prosecuting home-health-related fraud cases in a number of areas for a range of alleged offenses including billing for services not provided, attempting to bribe federal officials, and paying kickbacks to recruit patients (Department of Health and Human Services and Department of Justice 2011). The number of agencies has increased dramatically in California, Texas, and Florida—states that have experienced program integrity concerns in the past. However, unusual patterns of utilization raise concerns about other areas. For example, in 2008, five counties had more home health episodes than fee-for-service (FFS) beneficiaries. In 25 counties, the rate of FFS beneficiaries using home health services exceeded 20 percent in 2008, more than double the national average.

CMS has conducted several policy initiatives aimed at home health fraud. First, it required all home health providers in Harris County, Texas, and Los Angeles and some of its adjacent counties to re-enroll in Medicare. Under this demonstration, agencies had to prove that they met Medicare's standards for program enrollment and were visited by a Medicare contractor to verify the agency's existence. Second, CMS implemented a number of safeguards to curtail and recover fraudulent payments for outlier episodes paid to agencies in Florida's Miami–Dade county. CMS modified the outlier policy to reduce the amount of funds it allocated and limited outlier payments to no more than 10 percent of an agency's Medicare revenue. CMS also tightened ownership rules to make it more difficult for potentially fraudulent providers to enter Medicare.

Last year, the Commission recommended that the Congress give the Secretary the authority to suspend payment and the enrollment of new providers in areas that appear to be at high risk of fraud, and PPACA made several changes consistent with this recommendation:

- ***Temporary moratorium for enrollment of new providers.*** The Secretary has authority to halt the enrollment of new HHAs in areas deemed at high risk of fraud. CMS has indicated that it intends to look at a range of indicators when considering the use of this authority, such as when an area's growth in the number of providers or services appears to be disproportionate compared with growth in the number of Medicare beneficiaries. In addition, CMS plans to target areas where states and the Department of Justice have taken steps to curb fraud. CMS will finalize the rules for the new authority in 2011.

- ***Suspension of payments for services or providers that exhibit a high risk of fraud.*** The Secretary also has the authority to suspend payment when unusual patterns are observed for providers or geographic areas. If a review of spending for a certain service in an area finds unusual patterns and indicates a high risk of fraud, the Secretary may temporarily suspend payments for that service in that area. Alternatively, if an analysis indicates that a suspicious pattern is confined to certain providers, the Secretary may suspend payment for those providers. PPACA gives the Secretary discretion regarding the data or evidence required to determine high-risk status, so these new authorities are more flexible than past practices.

PPACA also provides the Secretary with the authority to require additional background checks for new providers of services deemed to be at high risk of fraud, and the

Department of Health and Human Services has indicated that new HHAs will be subject to more stringent review. Under a proposed rule, staff of new HHAs that are not part of a publicly traded company will be subject to criminal background checks, fingerprinting requirements for certain staff, and unannounced pre- and post-enrollment on-site visits. These checks are in addition to the Medicare certification process and are funded through a user fee charged to agencies that apply for billing privileges.

Finally, PPACA added a requirement intended to strengthen physician certification and oversight practices. Beneficiaries will need to have an encounter with a physician or nurse practitioner through an office visit or "telehealth" session when receiving home health care. The change was intended to ensure that beneficiaries receive a complete evaluation when home health care is ordered and that physicians not rely solely on information provided by HHAs when making decisions about patient care. It was believed that adding this requirement would improve program integrity and perhaps improve patient care, but implementation of the requirement may reduce its value. Office visits or telehealth encounters with a physician or nurse practitioner up to 90 days before or 30 days after the beginning of a home health episode will qualify toward the requirement. Such a large window reduces the access-to-care concerns that a prior visit requirement raises but does not ensure that beneficiaries receive an examination in a timely manner before home health care is delivered. CMS delayed enforcement of this requirement to the second quarter of 2011.

Are Medicare payments adequate in 2011?

To address whether payments for the current year (2011) are adequate to cover the costs efficient providers incur and how much providers' costs should change in the coming year (2012), we examine several indicators of payment adequacy. Specifically, we assess beneficiaries' access to care by examining the capacity and supply of home health providers and changes over time in the volume of services provided, quality of care, providers' access to capital, and the relationship between Medicare's payments and providers' costs. Overall, the Medicare payment adequacy indicators for HHAs are positive.

Beneficiaries' access to care: Most, but not all, beneficiaries live in an area served by home health providers

Supply and volume indicators show that beneficiaries have adequate access to home health services. Most beneficiaries live in an area served by home health providers, similar to the Commission's findings in prior years. Almost all beneficiaries (99 percent) live in a ZIP code served by at least one HHA and 98 percent live in a ZIP code with two or more agencies. Many areas are served by multiple providers, and 60 percent of beneficiaries live in ZIP codes served by 10 or more HHAs.

Our measure of access is based on data collected and maintained as part of CMS's Home Health Compare database as of November 2010. The service areas listed in the database are postal ZIP codes where an agency provided service in the past 12 months. This definition may overestimate access because agencies need not serve the entire ZIP code to be counted as serving it. At the same time, the definition may underestimate access if HHAs are willing to serve certain ZIPs but did not receive any requests from those areas in the preceding 12 months. This analysis excludes beneficiaries with unknown or missing ZIP codes.

Lower access in some areas may be linked to factors other than Medicare payment

Most regions have access to care, but a small number of beneficiaries live in areas where no agency reported operating. Several factors could explain the absence of an agency, some of which are unrelated to Medicare payment policy. As indicated in the section on financial performance in this chapter, in 2009 agencies in rural areas have average margins of more than 14 percent and those that serve remote rural areas have margins of more than 19 percent.

While this finding indicates that payments are adequate in general, it does not suggest that payments are equitably distributed for rural providers with unusual costs. For example, rural providers in some areas may have higher costs to retain staff. Costs may be higher because of long travel times to patient residences. Some rural areas may have low volumes that make it difficult for providers to operate with the same level of efficiency as agencies in areas with higher volume. Past interventions, such as the current payment add-on for rural areas, have not explicitly targeted rural areas with low access or higher costs; they have simply increased payments for all rural areas. These

TABLE 8–2

Number of home health agencies continues to rise

	2002	2003	2004	2005	2006	2007	2008	2009	2010	Average annual percent change 2002–2009	Average annual percent change 2009–2010
Number of agencies	7,057	7,342	7,804	8,314	8,955	9,404	10,036	10,961	11,488	6.5%	4.8%
Agencies that opened	399	562	656	693	828	624	773	1,091	666	15.5	–39.0
Agencies that closed	277	194	183	187	175	141	166	142	139	–9.1	–2.1
Number of agencies per 10,000 beneficiaries	2.0	2.0	2.1	2.3	2.5	2.6	2.8	3.1	3.2	6.4	2.0

Note: Agencies census includes all agencies operating during a year, including agencies that closed or opened.

Source: CMS's Providing Data Quickly database and 2010 trustees' report.

extra payments will raise the already high margins of many rural agencies, and it is unclear whether they have been sufficient to induce agencies to serve areas that have access issues. To the extent that Medicare policy needs to change, a better understanding of the specific factors contributing to higher costs in areas with limited or no access is important. It may be possible to design a payment policy that addresses the low-access areas more efficiently than the across-the-board approach that has been used in the past.

Anecdotal reports indicate that financial pressures from Medicaid and other programs may contribute to limited access in some areas. For example, the experience of one state indicated that Medicare was an adequate payer for rural areas but that declining rates from state Medicaid programs or local government programs were leading some agencies to close. Industry representatives stated that Medicare's high rates helped to subsidize the low payments from other programs.

The Commission believes that using Medicare to subsidize low rates for other payers is inappropriate and inefficient, particularly because the amount of subsidy received would be tied to Medicare volume and not to a shortfall in the agency's Medicaid payments. Such cross-subsidization can encourage states to lower their rates, effectively shifting costs to Medicare. Finally, Medicaid and other programs cover services and populations not covered by Medicare, making the use of Medicare funds to finance these services inappropriate.

The financial performance of rural HHAs suggests that Medicare payment policy is not a factor in low access for some rural areas. In 2009, the margin of rural HHAs did not differ significantly from that of urban agencies overall, and in the future rural agencies may have higher Medicare margins than urban agencies.

Capacity and supply of providers: Agency participation is at record levels

In 2010, HHAs numbered more than 11,400 with a net increase of 527 agencies (Table 8-2). At this level, the number of agencies has exceeded the high watermark of the 1990s, when the number of agencies exceeded 10,900. The high rate of growth is particularly concerning because new agencies appear to be concentrated in areas with fraud concerns, including California, Texas, and Florida. For example, 67 of the 666 new agencies in 2010 are in Miami–Dade County, Florida, an area that has experienced widespread health care fraud in home health and other services. The number of agencies in this county has doubled since 2007, when CMS launched an enforcement effort in the area.

The number of HHAs has been rising faster than growth in the number of beneficiaries, and this trend continues in 2010. Since 2004, when 99 percent of beneficiaries lived in an area served by an HHA, the number of agencies per 10,000 beneficiaries has risen from 2.1 to 3.2. However, supply can vary significantly among states. In 2008, Texas averaged 7 agencies per 10,000 beneficiaries, whereas New Jersey averaged 0.4 agency per 10,000 beneficiaries. While the extreme variation may imply some differences in access, the number of providers is a limited measure of capacity, as agencies can vary in size and capability. Also, because home health care is not provided in a

TABLE 8–3

Share of beneficiaries using home health services continues to rise even as enrollment in Medicare fee-for-service declines

	2002	2003	2004	2005	2006	2007	2008	2009	Average annual percent change 2002–2008	Average annual percent change 2008–2009
FFS beneficiaries (in millions)	35.0	35.9	36.5	36.8	36.2	35.6	35.3	35.2	0.1%	–0.4%
Home health users (in millions)	2.5	2.7	2.8	3.0	3.0	3.1	3.2	3.3	3.3	3.8
Share of beneficiaries using home health care	7.2%	7.5%	7.7%	8.1%	8.4%	8.7%	9.0%	9.4%	3.2	4.3
Total spending (in billions)	$9.6	$10.1	$11.5	$12.9	$14.0	$15.7	$17.0	$18.9	8.6	11.2
Episodes (in millions):	4.1	4.5	4.8	5.2	5.5	5.8	6.1	6.6	5.8	7.5
Per home health user	1.6	1.7	1.7	1.8	1.8	1.9	1.9	2.0	2.3	4.5
Per FFS beneficiary	0.12	0.12	0.13	0.14	0.15	0.16	0.17	0.19	5.5	9.0
Payments:										
Per home health user	$3,803	$3,780	$4,053	$4,339	$4,621	$5,076	$5,370	$5,748	5.1	7.0
Per FFS beneficiary	$274	$282	$314	$351	$388	$443	$482	$538	8.4	11.7

Note: FFS (fee-for-service).

Source: MedPAC analysis of home health standard analytical file.

medical facility, agencies can adjust their service areas as local conditions change. Even the number of employees may not be an effective metric, because agencies can use contract staff to meet their patient needs.

Volume of services continues to rise

The volume trend for 2009 suggests that home health growth is accelerating again. From 2008 to 2009, the number of home health care episodes increased by 7.5 percent, compared with the average annual growth of 5.8 percent between 2002 and 2008 (Table 8-3). The rate of use and the average number of episodes per user increased in 2009, consistent with trends from prior years. Between 2002 and 2009, the share of FFS beneficiaries using home health care increased from 7.2 percent to 9.4 percent. The average number of episodes per user increased from 1.6 to 2.0 from 2002 to 2009. The higher volume likely reflects a number of factors, including the growing number of agencies participating in the program. The rising volume indicates that beneficiaries in most areas generally have adequate access to care.

Some of the rise in episodes in 2009 and earlier years may be attributable to aspects of the PPS that reward volume. The PPS pays for care in 60-day episodes, so additional episodes result in higher total payments. In addition, agencies can increase payment by providing more therapy visits in an episode. The Commission has observed changes in volume that are consistent with both of these incentives. The number of subsequent episodes (second and later episodes in a spell of continuous episodes) has also grown significantly, as suggested by the rapid rise in the number of episodes per home health user. While some growth is likely related to changes in patient needs, the existence of these incentives can influence decisions about the amount and type of home health services beneficiaries receive.

Changes in therapy distribution

There has long been a concern that providers target therapy visit thresholds used to adjust home health payments, and volume changes since implementation of PPS provide evidence of providers targeting the ranges that appear most profitable. For example, before 2008, Medicare made an additional payment for episodes with 10 or more therapy visits. In the period between 2002 and 2007, episodes with 10 to 13 therapy visits jumped by about 90 percent, an annual rate of 13.8 percent. The

share of episodes with therapy visits just above and below the 10- to 13-visit range was relatively unchanged (Figure 8-1).

In 2008, CMS implemented revisions to the method by which therapy visits are factored in home health payments, replacing a single threshold with nine thresholds that increased payment more gradually. The changes had the effect of lowering payments for episodes in the 10- to 13-visit range, while it raised them for episodes just above and below this level. The threshold changes also resulted in the swiftest one-year change in therapy utilization since PPS was implemented.

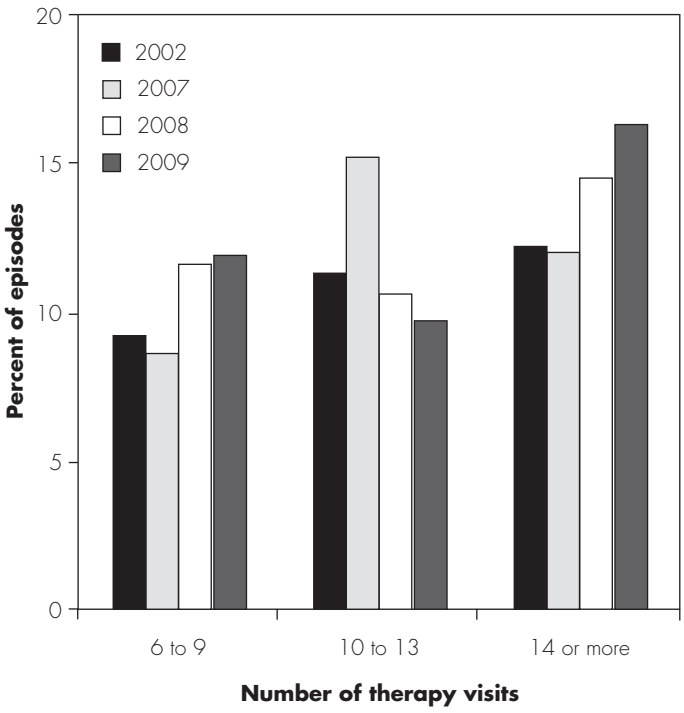
In 2008, the number of therapy episodes with decreased payments under the new system—those in the range of 10 to 13 therapy visits—dropped by about 28 percent. Conversely, payment for episodes with six to nine visits increased by 30 percent, and the share of these episodes increased from 8.6 percent to 11.6 percent. Payment for episodes with 14 or more therapy visits increased by 26 percent, and the share of these episodes increased from 12 percent to 14.5 percent. The immediate change in utilization demonstrates that home health providers can quickly adjust services to payment changes in the therapy visit thresholds. Put another way, the magnitude of the therapy changes and their correlation with the payment threshold changes suggest that provision of therapy is sensitive to payment incentives. In the 2011 home health payment regulation, CMS concluded that a significant portion of the changes in therapy use in 2008 was a "behavioral response" by HHAs attributable to the payment changes.

The volume data for 2009 indicate that the shifts that occurred in 2008 are continuing, though it appears that the decline in the 10- to 13-visit range is stabilizing. Episodes with 14 or more therapy visits increased by more than 20 percent, and those with 20 or more therapy visits increased by 30 percent (not shown). Episodes with six to nine therapy visits increased by 11 percent. The number of episodes in the 10- to 13-therapy-visit range dropped by about 1 percent. While patient severity may be related to some of these shifts, the continuing growth in the highest paid groups reinforces concerns that payment incentives influence the delivery of care.

In addition to changes in volume, anecdotal reports indicate that agencies are very sensitive to the financial incentives of the therapy thresholds. For example, a recent effort to identify best practices in therapy and other home health services noted that the use of the therapy thresholds for payment discouraged providers from using or developing best practices to guide therapy care (Hopper et al. 2009). In addition, industry consultants have encouraged HHAs to substitute therapists for nurses or for other services when possible (Shorr 2008). Though some of this substitution may contribute to better outcomes, these examples illustrate that the incentives of the therapy thresholds encourage providers to consider payment incentives, and not necessarily patient characteristics, when determining what services to provide. Agencies may favor therapy services even when lower cost services may offer comparable outcomes. All these indicators suggest that Medicare's use of therapy visits as a payment factor creates a significant vulnerability and that changes to address this weakness need to be considered.

FIGURE 8–1

Growth in episodes by year and number of home health therapy visits



Source: MedPAC analysis of home health standard analytical file.

Beneficiaries without a prior hospitalization account for a rising share of episodes

As the average number of episodes per home health user has increased, the share of episodes that are preceded by a

TABLE 8–4 **Increase in home health episodes by timing and source of referral**

	Number of episodes (in millions)		Percent change	Percent of episodes	
	2001	2008	2001–2008	2001	2008
Episodes preceded by a hospitalization or PAC stay:					
First	1.6	1.8	14%	40%	29%
Subsequent	0.3	0.4	46	8	7
Subtotal	1.9	2.3	19	48	37
Episodes not preceded by a hospitalization or PAC stay:					
First	0.8	1.2	48	20	19
Subsequent	1.3	2.7	111	32	44
Subtotal	2.1	3.9	87	52	63
Total	4.0	6.1	55	100	100
IPPS discharges	12.2	12.4	1.7		

Note: PAC (post-acute care), IPPS (inpatient prospective payment system). "First" indicates no home health episode in the 60 days preceding the episode. "Subsequent" indicates the episode started within 60 days of the end of a preceding episode. "Episodes preceded by a hospitalization or PAC stay" indicates the episode occurred less than 15 days after a hospitalization (including long-term care hospitals), skilled nursing facility, or inpatient rehabilitation facility stay. "Episodes not preceded by a hospitalization or PAC stay" (community admitted episodes) indicates that there was no hospitalization or PAC stay in the 15 days before episode start. Numbers may not add due to rounding.

Source: 2008 Datalink file and 2009 MedPAR data.

hospitalization or other Medicare-covered institutional stay (skilled nursing facility, inpatient rehabilitation facility, or long-term care hospital) has declined. For example, between 2001 and 2008, the share of episodes preceded by a hospitalization or post-acute care stay declined from 48 percent to 37 percent (Table 8-4). This decrease reflects two factors: a shift in how beneficiaries are initially referred to home health care and an increase in the number of episodes they receive after their first episode.

Between 2001 and 2008, the number of first episodes preceded by a hospitalization or post-acute care site increased by 14 percent, while the number of home health episodes not preceded by a hospitalization or post-acute care stay increased by 48 percent. During this period, the number of subsequent episodes increased by an aggregate 87 percent, and a subset—subsequent episodes not preceded by a hospitalization or post-acute care stay—increased by an aggregate 111 percent. Because of these trends, by 2008 most home health episodes were not preceded by a hospitalization or post-acute care stay.

The decline in the share of episodes preceded by a hospitalization or post-acute care stay may be due to a reduction in the demand for post-hospital care. From 2001 to 2008, FFS hospital discharges did not increase significantly, rising by less than 2 percent cumulatively. In fact, from 2006 to 2008, the number of FFS hospital discharges decreased. This reduced demand for home health post-hospital care occurred just as the number of HHAs was increasing. To compensate for the lack of post-hospital demand, new and incumbent agencies may have favored episodes not preceded by a hospitalization.

Patterns of use at the county level raise questions about the appropriateness of the rise in episodes per user. A review of data for 2008 indicates that a county's rate of use is positively correlated with the number of episodes each home health patient receives (Figure 8-2). That is, as the number of users in a county rises, the number of episodes per home health user increases. It is not clear why beneficiaries in counties with higher use rates would need more services than those in counties with lower rates of use.

Quality

In past reports, the Commission has reported on home health quality measures using the Outcome-Based Quality

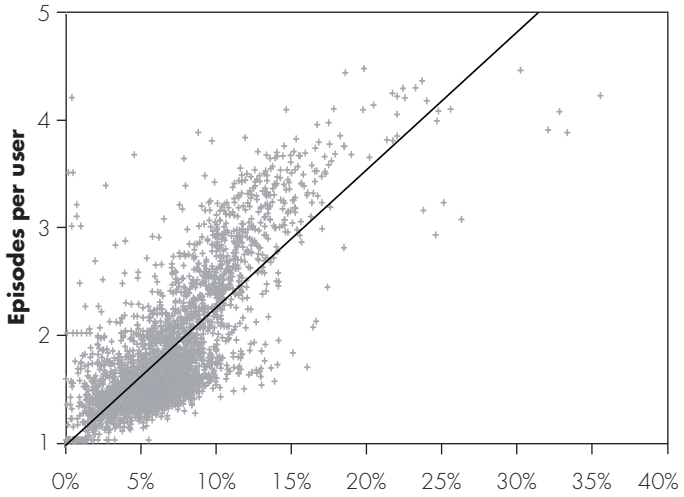
Monitoring (OBQM) data set. These measures, collected through the Outcome and Assessment Information Set, examine patients' clinical severity and functional limitations at the beginning and end of an episode. The Commission reported in prior years that scores for the five functional measures improved, while the adverse event measures (hospitalization and emergency care use) were unchanged (Table 8-5). The data for 2010 follow a similar pattern, although the emergency care use indicator is not reported for 2010.

Though these indicators provide a useful indication of the typical levels of quality overall, the Commission is concerned that the measures did not always capture changes in quality that were specifically related to a patient's need for home health care. For example, improvement in walking is reported for all patients, regardless of whether they needed home health care for a mobility-related condition. The hospitalization rate is for any hospitalization that occurs at discharge from home health services, regardless of the cause. To supplement the broad OBQM measures with additional detail, the Commission has ordered a study by the University of Colorado to develop clinically focused measures that will measure changes in quality related to specific patient diagnosis.

At the Commission's direction, the University of Colorado is examining two areas for more clinically focused measures: the amount of improvement in walking for beneficiaries who receive home health care after a hip or knee replacement and the hospitalization rate for causes that are potentially preventable. These measures and conditions were selected because they represent areas of special interest by the Commission and the Medicare program. We believed that one of the measures needed to

FIGURE 8–2

Comparison of the rate of FFS beneficiaries using home health and the average number of episodes per user by county, 2008



Note: FFS (fee-for-service). Excludes counties with fewer than 100 Medicare beneficiaries.

Source: MedPAC analysis of home health standard analytical file, 2008.

TABLE 8–5

Outcomes improve on functional measures though the rate of adverse events is unchanged

	2004	2005	2006	2007	2008	2009	2010
Functional measures (higher is better)							
Improvements in:							
Walking	36%	37%	39%	41%	44%	45%	47%
Transferring	50	51	52	53	53	54	54
Bathing	59	61	62	63	64	64	65
Medication management	37	39	40	41	43	43	43
Pain management	59	61	62	63	64	64	64
Adverse event measures (lower is better)							
Hospitalization	28	28	28	28	29	29	29
Emergency care	21	21	21	21	22	22	N/A

Note: N/A (not available).

Source: MedPAC analysis of CMS Home Health Compare data.

TABLE 8–6 **Medicare margins for freestanding home health agencies, 2008 and 2009**

	2008	2009	Percent of agencies, 2009	Percent of episodes, 2009
All	17.0%	17.7%	100%	100%
Geography				
Majority urban	17.3	17.9	83	84
Majority rural	16.0	16.6	17	16
Type of control				
For profit	18.6	18.7	84	82
Nonprofit	12.3	14.4	11	16
Government*	N/A	N/A	N/A	N/A
Volume quintile				
First	9.0	8.9	20	0.8
Second	9.3	8.7	20	3.8
Third	13.3	12.6	20	7.7
Fourth	16.0	16.5	20	15.0
Fifth	18.9	20.1	20	72.7

Note: N/A (not available).
*Government-owned providers operate in a different context from other providers, so their margins are not necessarily comparable.

Source: MedPAC analysis of home health Cost Report files from CMS.

include a mobility-related condition, such as hip or knee replacement, as the amount of therapy provided through home health care has increased significantly. Currently, the OBQMs measure only whether any improvement occurred and not how much improvement occurred. In addition, we wanted to consider a more focused hospitalization rate that includes conditions that evidence suggests could be reduced or prevented by proper home health care. We expect to report the results for these measures next year.

Providers' access to capital: Adequate access to capital for expansion

Few HHAs access capital through publicly traded shares or public debt, like issuing bonds. HHAs are not as capital intensive as other providers because they do not require extensive physical infrastructure, and most are too small to attract interest from capital markets. Information on publicly traded home health companies provides some insight into access to capital but has limitations. Publicly traded companies may have businesses in addition to Medicare home health care, such as Medicaid and private-duty nursing. Also, publicly traded companies are a small portion of the total number of agencies in the industry.

Analysis of the for-profit companies indicates that they have adequate access to capital, though on terms less favorable than in previous years. The changes in home health policy in PPACA and the 2011 PPS regulation have trimmed revenues for the home health industry. In addition, several federal investigations have been launched into the therapy billing practices of some of the publicly held home health companies. These factors have weakened investor outlook on these firms and made lenders more cautious in the terms they offer home health firms seeking capital. However, there is evidence that the major for-profit companies still have access to capital or are adequately capitalized. One home health firm recently completed a $1.2 billion acquisition of a large hospice company, and two other home health firms announced stock repurchase programs. These actions suggest that the publicly traded for-profit firms have access to capital markets.

For smaller or nonpublic entities, the entry of new providers indicates that access to capital for privately held agencies is adequate. In 2010, 666 new HHAs entered Medicare; most of these agencies are for profit.

Medicare payments and providers' costs: Payments increase by more than costs in 2009

The average payment per episode increased by 2.5 percent in 2009, as episodes continued to migrate to a higher

TABLE 8–7 **Attributes of high- and low-margin Medicare home health agencies, 2007**

Characteristic	Low-margin agencies	High-margin agencies	All
Medicare margin	–9%	37%	16.9%
Average total visits (Medicare and non-Medicare)	22,437	28,039	26,430
Average Medicare episodes	604	777	830
Average cost per visit (wage index removed)	$136	$89	$113
Composite quality score	0.96	0.96	0.97
Case-mix values	1.23	1.32	1.27
Therapy episodes as a share of total episodes	25%	30%	27%

Note: Values shown are means for the quintile. High-margin quintile agencies were in the top 20 percent of the distribution of Medicare margins in 2007. Low-margin quintile agencies were in the bottom 20 percent of the distribution of Medicare margins in 2007.

Source: 2007 cost reports, 20 percent sample of claims from home health Datalink file, OASIS data.

paying mix of services. The rise in payments was not matched by a proportionate increase in average costs. Cost growth in 2009 was flat; that is, agencies experienced growth of 0.5 percent. This rate is below the change in the home health market basket for 2009 and consistent with the experience of cost below market basket inflation, which has occurred since the inception of PPS. This low rate of cost growth has contributed to the industry's ability to maintain high Medicare margins in the face of reductions to the payment update.

Medicare payments continue to exceed costs in 2009

In 2009, HHA margins in aggregate were 17.7 percent for freestanding agencies, up from the previous year (Table 8-6). We focus on freestanding agencies because they are the majority of providers and because their costs do not reflect an allocation of overhead costs, as with hospital-based agencies.

Since an individual HHA can serve a mix of urban and rural patients, we determine an agency's rural or urban designation based on where most of its episodes are located. Under this definition, in 2009, rural providers had slightly lower margins than urban providers, but the difference was less than 2 percentage points. Because PPACA includes a 3 percent add-on for episodes delivered in rural counties, margins for rural agencies may exceed those for urban agencies in future years. To gain a better understanding of providers that serve frontier rural areas, we examined margins for agencies that were majority rural and for which more than 30 percent of episodes were in counties with urban populations of fewer than 2,500 people. For these agencies, margins were 19.8 percent higher than the margins of all other agencies.

Historically, Medicare margins have varied widely among HHAs. In 2007, the agencies in the bottom quintile of the Medicare margin distribution had an aggregate average margin of –9 percent, while the agencies in the top margin quintile had an aggregate average margin of 37 percent, consistent with the variation reported in prior years (Table 8-7). To better understand the factors driving this variation, the Commission examined in a prior analysis the characteristics of high- and low-margin agencies in 2007. Our analysis of margins by provider, beneficiary, and episode characteristics suggests that providers can deliver quality care and earn significant profits under current payment levels and that those with the lowest costs and the highest case mix have the best financial performance.

The most salient difference between high- and low-margin agencies was in cost per episode and agency size. High-margin agencies had lower costs and higher episode volume. The cost per episode of high-margin agencies was about 40 percent lower than that for low-margin agencies, driven primarily by a lower cost per visit. The lower costs were likely related to the larger average size of high-margin agencies, as higher volume permits them to achieve economies of scale that result in lower costs and better financial performance. The analysis of the case mix of high- and low-margin agencies suggested that Medicare overpays for episodes with high case-mix values, as

TABLE 8–8 **Accuracy of current and model home health case-mix adjusters, 2008**

	Type of service		
	Therapy	Nontherapy	Total
Current case-mix system:			
With therapy thresholds	76.9%	0.1%	55.0%
Without therapy thresholds	11.6	8.2	7.6
Model case-mix system	27.8	14.6	15.3

Note: Nontherapy services include nursing, home health aide, and medical social work visits. Excludes outlier episodes. Values are percent of service use explained by each model (r^2).

Source: Urban Institute analysis of 2008 Datalink file.

high-margin agencies had case-mix values that were 7 percent higher than low-margin agencies. The higher case-mix values were attributable to high-margin agencies providing more therapy episodes (which have higher case-mix values) and nontherapy episodes with high case-mix values. This result suggests that episodes with high case-mix values are overpaid and those with low case-mix values are underpaid.

To better understand the case-mix system finding, the Commission ordered an analysis by the Urban Institute. The analysis found that the current case-mix system predicted 55 percent of episode-level costs for all nonoutlier episodes, but the explanatory power dropped to 7.6 percent if the number of therapy visits received was excluded as a case-mix grouping (Table 8-8).[1] The steep decline in explanatory power indicates that the case-mix adjuster is highly dependent on the inclusion of therapy visits provided and that patient characteristics are less important in the predictive power attained by the current case-mix system. This reliance on the amount of services provided is counter to the goals of prospective payment, as the number of therapy visits provided is not a prospective attribute of a patient but a factor under the control of the provider.

Examining therapy and nontherapy services separately is instructive. The current case-mix system predicted about 77 percent of the variation in episode-level therapy costs but less than 1 percent of the variation in nontherapy costs.[2] This high predictive value for therapy services is not surprising, as the level of therapy use is built into the case-mix model. But the finding of lower explanatory power for nontherapy costs is quite notable, as the nontherapy costs compose a majority of home health services. Most home health episodes contain at least one nontherapy visit, and for about 47 percent of full episodes nontherapy visits are the only services provided. For a significant number of episodes, the case-mix system has limited predictive power.

Episodes with the most nontherapy services were significantly affected by the current case-mix system's low explanatory power. The case-mix system correctly identified only 15 percent of the cases in the top decile of nontherapy services.[3] This weakness further raises concerns about the current case-mix system, because poor predictive power for high-cost patients provides agencies with an incentive to avoid these patients or reduce services to them.

In addition, episodes with higher case-mix values, including therapy episodes, appeared to be more profitable. The Urban Institute analysis found that for every 1 percent increase in case-mix weight, costs for the average provider increased by about 0.88 percent. This result indicates that, for the average provider, the relative weights (and payments) increased faster than costs increased; thus, providers with higher relative weights receive more generous payments than providers with lower relative weights. Since therapy episodes are most of the high relative weight episodes in the home health PPS, providers with more of these episodes, on average, have lower costs than the case-mix system assumes.

Modeling the impacts of an alternative system

Modeling an alternative case-mix system allows the Commission to assess the impact of using a predictive model to set payments for therapy services and updating the patient characteristics used to predict nontherapy resource use. The alternative system developed by the Urban Institute is intended to be a prototype that would need modification after further analysis, as some factors that might be appropriate for a full payment model have not been assessed. For example, this model system does not account for interactions among diagnostic conditions or include certain factors in the current payment system, such as splitting the episodes into categories based on their timing in a spell of back-to-back episodes. The measures of statistical performance discussed below reflect the current model and will be updated as the Commission refines its work.

The central feature of this model is that it bases payment for therapy services on patient characteristics, which

is conceptually similar to how the existing system sets payment for nontherapy services. A literature review and exploratory statistical analysis were used to identify variables with suitable statistical and policy characteristics, and examples of the predictors in the final model include activities of daily living and other functional measures; several diagnostic categories, including cancer, skin disorders, diabetes, hypertension, Parkinson's disease, and other conditions; other conditions, such as wounds and ulcers; source of admission (e.g., skilled nursing facility, hospital); and information about the type of episode (e.g., whether it is a resumption of care or an initial episode).

Separate models were developed for therapy and nontherapy services. This approach provides some insight into how the relationships for each variable differ for therapy and nontherapy services. However, it may be possible to combine the two models in implementation.

Performance of the model system

The model case-mix system explains about 15 percent of the variation in therapy and nontherapy costs at the episode level (Table 8-8).[4] Though the current case-mix system has a higher explanatory power, it achieves it by using therapy visits as both an explanatory variable and as a portion of the outcome being predicted. Without the therapy threshold variables, the overall explanatory power of the current case-mix system is substantially lower than the model system.

The improvement in explanatory value for the model case-mix system is even greater at the service-type level. The model system has an explanatory value of 14.6 percent for nontherapy services at the episode level, compared with less than 8.2 percent for the current system. For therapy services, the model system explains 27.8 percent of the costs at the episode level. The model is also superior in predicting resource use for high-cost nontherapy cases. It correctly identifies 28 percent of the highest cost nontherapy cases, an improvement that is almost double what the predictors in the current payment system achieve.

Distributional impacts of the model's refinements

Under the model's refinements, the most significant payment changes would be that many nontherapy services that appear to be undervalued under the current case-mix system would see large payment increases. The model would lower payments for therapy episodes by 10 percent and increase them for nontherapy episodes by 25 percent (Table 8-9, p. 190). Payments for dual-eligible Medicare beneficiaries would increase by 1.3 percent. Payments for hospital-based HHAs would increase 7.5 percent, while payments for freestanding agencies would fall by 1.4 percent. Nonprofit agencies, which typically provide less therapy, would see their payments increase by 7 percent on average.

Agencies that provided more of the services undervalued under the current system—principally nontherapy services—would have higher margins under the new system. Agencies that provided the most nontherapy episodes would see an increase of 16.7 percent, while those that provided the most therapy services would see a decrease of 18.3 percent (Table 8-10, p. 191).

Overall, the model case-mix system offers several advantages over the current case-mix system. It eliminates the incentive to provide more therapy visits solely to increase payment; it significantly improves payment accuracy for nontherapy services, the majority of services provided; and it improves the accuracy of payments for high-cost beneficiaries who have significant nursing and home health aid needs.

Projecting margins for 2011

In modeling 2011 payments and costs, we incorporate policy changes that will go into effect between the year of our most recent data, 2009, and the year for which we are making margin predictions. The major changes are:

- payment updates in 2010 and 2011, the latter equal to market basket minus 1 percent under PPACA;
- a 3 percent add-on for episodes provided in rural areas under PPACA;
- a base rate reduction of 2.5 percent in 2011 attributable to PPACA;
- a planned 2010 and 2011 payment reduction of 3.89 percent to account for coding improvement in 2000 through 2009;
- a case-mix value increase of 2 percent a year (due to an increase in patient severity, coding improvement, and utilization changes); and
- assumed cost increases of 1 percent in 2010 and 1.7 percent in 2011 (based on historic trends).

On the basis of these factors, we project a margin of 14.5 percent in 2011.

TABLE 8–9 **Ratio of payments under model system to payments under current case-mix system**

	Type of episode				
	All	**Therapy**	**Nontherapy**	**High nontherapy**	**Dual eligible**
All agencies	1.000	0.899	1.246	1.291	1.013
Type of facility					
Freestanding	0.986	0.880	1.242	1.289	1.004
Hospital based	1.075	1.001	1.276	1.305	1.085
Type of control					
Nonprofit	1.070	1.001	1.280	1.294	1.083
For profit	0.962	0.842	1.231	1.287	0.987
Government	1.048	0.924	1.279	1.317	1.059
Geography					
Urban	0.996	0.901	1.249	1.289	1.009
Rural	1.022	0.892	1.239	1.299	1.033
Volume quartile					
First	1.018	0.858	1.303	1.299	1.005
Second	1.024	0.898	1.292	1.332	1.036
Third	1.000	0.890	1.261	1.293	1.020
Top	0.997	0.903	1.233	1.282	1.008

Note: High nontherapy episodes are those in the top decile of actual nontherapy resource use. Analysis excludes payment outlier episodes.

Source: Urban Institute analysis of Datalink file, 2008 data.

Medicare continues to overpay for home health services

The high margins for home health in 2011 reflect that payments substantially exceed costs and that the PPACA reductions and administrative adjustments by CMS have not significantly reduced payments. These findings are consistent with those of previous years; on average, Medicare home health payments have exceeded costs by 17.5 percent since 2001. These high profits occur despite numerous efforts to lower margins. In every year but one, 2007, the payment update has been reduced through legislative changes, administration action, or both. However, average payments have increased each year, in part because HHAs have increased the number of episodes that qualify for additional therapy payments. The combination of low cost increases and rising average payments has resulted in overpayments that are inconsistent with paying at a level to support the efficient provider and contribute to the long-run sustainability challenges of the program. Since home health care is financed through Part A and Part B, the higher payments contribute to the insolvency of the Hospital Insurance Trust Fund and the cost of the Part B premium paid by beneficiaries. High payments may also encourage the entry of marginal or fraudulent providers who are disproportionately motivated by the financial returns offered by excessive payments.

These overpayments likely originated when Medicare established the initial PPS payment rates. The BBA required that the PPS base rate for a home health episode be budget neutral so that aggregate spending would equal the spending that would have occurred if IPS had remained in effect. However, between 1998 and 2001, the average number of home health visits per episode dropped from 31.6 to 21.4 visits and has remained at about this level through 2009 (Table 8-11, p. 192). Even though some reductions were made to the initial base rate, these adjustments did not anticipate the magnitude by which HHA costs would fall. HHAs had average Medicare profits of more than 23 percent in 2001, the first year the base rate was in effect. Because providers delivered fewer visits than was assumed, payments under PPS have been consistently greater than providers' costs. Medicare rates

TABLE 8–10 **Change in payments for home health agencies under alternative model**

	Number of providers	Payment ratio	Decrease ≥25%	Decrease 10 to 25%	Decrease 5 to 10%	−5 to +5%	Increase 5 to 10%	Increase 10 to 25%	Increase ≥25%
All agencies	1,832	1.000	4%	16%	10%	24%	12%	23%	11%
Type of facility									
Freestanding	1,540	0.986	5	18	11	24	11	21	10
Hospital based	292	1.075	0	7	8	24	15	34	14
Type of control									
Nonprofit	387	1.070	1	7	9	25	16	31	12
For profit	1,279	0.962	5	20	11	25	11	20	9
Government	166	1.048	2	8	5	19	11	28	26
Percent of Medicaid episodes									
Highest 10 percent	190	1.013	9	17	7	16	12	23	16
Lowest 10 percent	184	0.964	5	20	10	23	9	16	16
Percent of episodes with therapy (6 or more visits)									
Highest 10 percent	184	0.817	27	45	14	9	2	3	0
Lowest 10 percent	184	1.167	0	0	2	8	6	33	52
Average nontherapy minutes for nontherapy episodes									
Highest 10 percent	178	1.036	6	13	5	19	11	26	20
Lowest 10 percent	178	0.959	7	24	11	20	8	20	11

Note: Analysis excludes payment outlier episodes.

Source: Urban Institute analysis of Datalink file, 2008 data.

started out too high, and since then the cost increases have not kept pace with the annual payment update, permitting HHAs to maintain high margins.

The need to reset the base rate in Medicare is particularly acute because the high margins exist across the range of agency types. Urban, rural, for-profit, and nonprofit agencies have margins in excess of 14 percent. While some agencies have margins significantly lower than average, the Commission's review found that these differences are primarily due to their higher costs. These higher costs do not appear to be related to patient severity, as for most measures low-margin agencies did not serve more severe patients. Low-margin agencies provided fewer episodes that qualified for additional therapy payments, and the Commission believes the current case-mix adjuster overvalues these services. However, fixing this imbalance can be accomplished by refining the case-mix adjuster, as discussed earlier. It would still be necessary to lower the base rate to ensure that high margins do not continue, as changes in the case-mix adjusters affect only the distribution of payments among providers and not the total amount of spending.

Encouraging appropriate use of the home health benefit

Most of Medicare's policies for appropriate use have addressed supply-side issues by creating incentives and policies intended to ensure that physicians and HHAs provide appropriate care. Adding a beneficiary cost sharing for home health care could be an additional measure to encourage appropriate use of home health services. The health services literature has generally found that beneficiaries consume more services when cost sharing is limited or nonexistent, and some evidence suggests that these additional services do not always contribute to improved health outcomes. Cost sharing may be appropriate for home health care because there are no clear clinical

TABLE 8–11 **Change in visits per episode before and after the implementation of PPS**

				Percent change	
	1998	2001	2009	1998–2001	2001–2009
Physical therapy	3.1	4.3	4.8	40.4%	11.1%
Occupational therapy	0.5	0.8	1.0	43.7	35.5
Speech–language pathology	0.2	0.2	0.2	–7.1	7.5
Skilled nursing	14.1	10.5	11.8	–25.2	12.2
Medical social work	0.3	0.2	0.1	–35.8	–32.9
Home health aide	13.4	5.5	3.5	–59.1	–35.6
Total	31.6	21.4	21.5	–32.1	0.2

Note: PPS (prospective payment system).The home health PPS was implemented in October 2000.

Source: CMS 2000; MedPAC analysis of home health standard analytical file, excluding low utilization payment adjustment episodes.

standards for many uses of the benefit. Some of this growth reflects longer stays in home health care, and there is a concern that long-term use of the service in some instances may represent the benefit acting more as a long-term care benefit than is appropriate for Medicare. Adding a cost-sharing requirement would give beneficiaries some incentive to weigh the value of home health services before accepting them and would dissuade beneficiaries from using it when it has minimal value. Cost sharing would also mitigate incentives in the home health PPS that reward volume.

A disadvantage of requiring beneficiary cost sharing for post-hospital episodes of home health care is that it could encourage beneficiaries to use higher cost post-acute care settings, such as skilled nursing facilities or inpatient rehabilitation facilities. However, beneficiaries admitted directly to home health care from the community or those entering a second or later home health episode would be ineligible or unlikely to use other post-acute care providers. In addition, cost sharing for these episodes would focus the incentive on categories of episodes that have exhibited high rates of growth.

The financial incentives under PPS encourage the use of more episodes, so a per episode copayment, as opposed to a per visit copayment, would best target providers' financial incentives. A per visit copayment could drive beneficiaries to demand fewer visits in an episode, which could compound an agency's incentive to stint on care under PPS's global payment. The per episode copayment would be less financially burdensome for beneficiaries who require more visits in an episode, as those additional visits would not increase beneficiary liability.

Setting the cost-sharing amount

The amount of the copayment could take several forms. Research from the RAND Health Insurance Experiment (HIE), a seminal study on utilization, suggests that the greatest marginal impact on utilization occurs when beneficiary liability rises from no cost sharing to even a relatively small amount (while the HIE study is considered important, it did not specifically assess the impact of cost sharing for the elderly or for home health services). For example, Medicare currently charges 20 percent coinsurance for many Part B services. Setting the copayment amount equal to 20 percent of the average episode payment would have resulted in a copayment of $600 in 2008. This amount, equal to more than half of the inpatient hospital deductible, would be excessive for a single episode of service. As a practical matter, policymakers could consider a lower amount.

At $300 per episode, a copay would equal 10 percent of the average episode. For the average nonoutlier episode in 2008, a $150 copayment would equal about $9 per home health visit, less than the amount a beneficiary would pay for a typical outpatient evaluation and management visit or outpatient therapy visit ($12 to $25), depending on the length of the visit. Other Medicare services have cost sharing that is significantly higher. For example, in 2011 the inpatient hospital deductible is more than $1,000 per spell of illness, and beneficiaries must pay $141.50 for each day of skilled nursing facility care after the 20th day of a stay (Table 8-12).

Under a $150 copayment, Medicare would still pay the majority of home health benefit expenses, and beneficiaries

TABLE 8–12 **Cost-sharing requirements for selected Medicare services in 2011**

Category	Amount
Part A	
Hospital stay	$1,132 deductible for days 1–60 each benefit period. $283 per day for days 61–90 each benefit period. $566 per "lifetime reserve day" after day 90 each benefit period (up to 60 days over lifetime).
Skilled nursing facility stay	$0 for the first 20 days each benefit period. $141.50 per day for days 21–100 each benefit period. All costs for each day after day 100 in the benefit period.
Hospice care	$0 for hospice visits. Up to a $5 copay for outpatient prescription drugs. 5% of the Medicare-approved amount for inpatient respite care.
Blood	All costs for the first 3 pints (unless donated to replace what is used).
Part B	
Deductible	The first $162 of Part B-covered services or items.
Physician and other medical services	20% of the Medicare-approved amount for physician services, outpatient therapy (subject to limits), most preventive services, and durable medical equipment.
Outpatient hospital services	A coinsurance or copayment amount that varies by service, averaging 23% in 2009. These rates are scheduled to phase down to 20% over time. No copayment for a single service can be more than the Part A hospital deductible ($1,100 in 2010).
Mental health services	45% of the Medicare-approved amount for outpatient mental health care.*
Clinical laboratory services	$0 for Medicare-approved services.
Home health care	$0 for home health care services.
Durable medical equipment	20% of the Medicare-approved amount.
Blood	All costs for the first 3 pints, then 20% of the Medicare-approved amount of additional pints (unless donated to replace what is used).

Note: A benefit period begins the day a beneficiary is admitted to a hospital or skilled nursing facility and ends when the beneficiary has not received hospital or skilled nursing care for 60 days in a row. If the beneficiary is admitted to the hospital after one benefit period has ended, a new benefit period begins and the beneficiary must again pay the inpatient hospital deductible. There is no limit to the number of benefit periods. Part A cost sharing increases over time by the same percentage update applied to payments to inpatient hospitals and adjusted to reflect real change in case mix.
* This coinsurance rate is scheduled to phase down to 20 percent by 2014.

Source: CMS. 2010. *Medicare & You 2011*. Baltimore, MD: CMS.

would receive significantly more in benefits, on average, than they paid in cost sharing. For example, for the average episode payment of about $3,000 in 2008, Medicare would pay about $29 in benefits for every $1 the beneficiary paid. The ratio of program expenditures to beneficiary expenditures would be even greater for episodes with above average resource use.

One concern with cost sharing is that it can lead beneficiaries to reduce their use of effective as well as ineffective care. Although some studies have found evidence of adverse effects of reduced care due to cost sharing (Chandra et al. 2010, Rice and Matsuoka 2004), the RAND HIE, concluded that, on average, nonelderly patients who consumed less health care because of cost sharing suffered no net adverse effects (Newhouse 1994). However, none of these studies specifically assessed cost sharing for home health benefits.

There are concerns that a copay could result in adverse effects. For example, the HIE study found that some health outcomes were worse for low-income beneficiaries subject to higher cost sharing. However, a mitigating factor is that beneficiaries dually eligible for Medicare and Medicaid

would not be subject to the copay because cost sharing is covered through Medicaid. Not all states cover these expenditures, but beneficiaries are not required to pay the cost sharing when it is not covered by the state Medicaid program; in these instances, the federal Medicare payment is the only reimbursement the provider receives. In addition, episodes with four or fewer visits could also be exempt from cost sharing to protect against the potential for users with relatively few visits to shoulder a disproportionately high burden. With these exceptions, a preliminary estimate indicates that in 2008, about 33 percent of episodes would have been subject to a copayment. Similarly, about one-third of beneficiaries who used home health services, equal to 1 million beneficiaries, would have to pay the copayment. The other 2.2 million beneficiaries who used home health services in 2008 would not have to pay because they were dual-eligible beneficiaries, the episodes they received were preceded by a hospital or post-acute care stay, or they received few visits in their episode.

How should Medicare payments change in 2012?

Our review of the Medicare home health benefit indicates that access is more than adequate in most areas and that Medicare payments are well in excess of costs. On the basis of these findings, the Commission has concluded that home health payments need to be significantly reduced. In addition to payment adequacy, the Commission is concerned that a number of long-standing problems in the home health benefit have not been addressed. For example, for many years the Commission and others have noted the aberrant patterns of home health use, which suggest fraud. In addition, the rising utilization of therapy services is clearly tied to distortions in the payment system. These trends suggest that Medicare does not receive the highest value from its home health expenditures and that changes are necessary to make the payment system more effective and efficient. Specifically, Medicare needs to address payment accuracy, beneficiary incentives, and program integrity. The Commission is also including our recommendation from last year which creates patient safeguards (see text box, p. 197).

Update recommendation

RECOMMENDATION 8-1

The Secretary, with the Office of Inspector General, should conduct medical review activities in counties that have aberrant home health utilization. The Secretary should implement the new authorities to suspend payment and the enrollment of new providers if they indicate significant fraud.

RATIONALE 8-1

For many years, the Commission has noted widespread patterns of aberrant home health utilization. Utilization data suggest that agencies in some counties are increasing the demand for home health care by expanding to serve less severe patients who do not meet Medicare coverage requirements for home health care or by billing for services not provided. Under PPACA, the Department of Health and Human Services has the authority to suspend payment and the enrollment of new providers in areas where widespread fraud is occurring. As a precursor to using these new authorities, the Department of Health and Human Services and the Office of Inspector General should conduct claims reviews in counties that have aberrant patterns of use.

As a first step, the Secretary should focus on areas that have home health use rates that are more than twice the national average and where more than 20 percent of all FFS beneficiaries used home health services (Table 8-13). In these counties, an average of 26 percent of FFS beneficiaries used home health care, compared with 9.4 percent nationwide, and the average user received 3.5 episodes, compared with 2 episodes per user nationwide. Differences in patient severity, the availability of other services, and other legitimate factors may explain some of the high use in these areas, but differences so much greater than the national benchmarks warrant further exploration. The Secretary should review claims in these areas to determine whether evidence of fraud exists, and the new authorities in PPACA should be implemented if warranted.

IMPLICATIONS 8-1

Spending

- The Congressional Budget Office has already scored savings from the PPACA provision, so its baseline assumes savings for the new authorities. Implementing this authority for home health care would lower home health spending if fraud were discovered. CMS and the Office of Inspector General would incur some administrative expenses to conduct these activities.

Beneficiary and provider

- Appropriately targeted reviews would not significantly affect beneficiary access to care or provider willingness to serve beneficiaries.

TABLE 8–13

Counties with highest rates of use of home health care and average episodes per user, 2008

State	County	Number of: FFS beneficiaries	Number of: Home health users	Number of: Episodes	Share of FFS beneficiaries using home health	Episodes per user
TX	Starr	7,500	2,654	11,197	35.4%	4.2
TX	Hidalgo	65,769	21,834	84,585	33.2	3.9
TX	Duval	1,891	618	2,515	32.7	4.1
TX	Brooks	1,243	397	1,547	31.9	3.9
TX	Jim Hogg	774	233	1,038	30.1	4.5
FL	Miami–Dade	172,924	45,301	138,730	26.2	3.1
TX	Zapata	1,440	367	1,502	25.5	4.1
TX	Cameron	38,082	9,528	30,673	25.0	3.2
OK	Choctaw	3,554	877	3,574	24.7	4.1
TX	Jim Wells	5,395	1,326	5,280	24.6	4.0
MS	Claiborne	1,135	278	811	24.5	2.9
TX	Red River	3,025	723	3,015	23.9	4.2
TX	Willacy	2,673	633	1,992	23.7	3.1
LA	Madison	1,653	390	1,699	23.6	4.4
OK	McCurtain	6,036	1,398	6,000	23.2	4.3
MS	Sharkey	1,015	228	957	22.5	4.2
LA	East Carroll	1,379	308	1,320	22.3	4.3
TX	Webb	21,238	4,661	17,905	21.9	3.8
MS	Jefferson	1,349	296	1,247	21.9	4.2
LA	Avoyelles	7,117	1,561	6,312	21.9	4.0
OK	Pushmataha	2,636	571	2,169	21.7	3.8
OK	Latimer	1,595	345	1,463	21.6	4.2
TN	Hancock	992	211	803	21.3	3.8
LA	Caldwell	1,987	405	1,673	20.4	4.1
LA	Washington	7,741	1,557	5,672	20.1	3.6

Note: FFS (fee-for-service).

Source: MedPAC analysis of the 2008 home health standard analytical file and the 2008 Medicare Denominator file.

RECOMMENDATION 8-2

The Congress should direct the Secretary to begin a two-year rebasing of home health rates in 2013 and eliminate the market basket update for 2012.

RATIONALE 8-2

PPACA has legislated that a limited rebasing begin in 2014, but such a delay appears unnecessary given the current indicators for the home health industry. However, the Commission believes that rebasing should be implemented at the same time as or immediately after the revisions to the case-mix adjustment (described in Recommendation 8-3). These changes would ensure that under rebasing the distribution of payments among providers more accurately reflects patient severity. For 2012, the Commission recommends eliminating the market basket update and implementing a two-year phased-in rebasing beginning in 2013, concurrent with the revisions to the case-mix system. Basing payments on providers' actual costs would effectively reset payment rates to lower levels.

IMPLICATIONS 8-2

Spending

- This recommendation would reduce Medicare spending $250 million to $750 million in 2012 and $5 billion to $10 billion over 5 years.

Beneficiary and provider

- Some reduction in provider supply is likely, particularly in areas that have experienced rapid growth in the number of providers. Access to appropriate care is likely to remain adequate, even if the supply of agencies declines.

RECOMMENDATION 8-3

The Secretary should revise the home health case-mix system to rely on patient characteristics to set payment for therapy and nontherapy services and should no longer use the number of therapy visits as a payment factor.

RATIONALE 8-3

The home health case-mix system has significant weaknesses; its use of therapy visits as a payment factor creates a financial incentive for providers to deliver visits based on their payment impact, and it has a low predictive power for nontherapy services. These findings indicate that unless the case-mix system is revised, agencies will continue to have significant incentives to favor therapy patients, avoid high-cost nontherapy patients, and base the number of therapy visits on payment incentives instead of patient characteristics. A revised system would reduce or eliminate these problems and encourage agencies to focus on beneficiary characteristics when setting plans of care. As stated in Recommendation 8-2, the Commission believes the revisions to the case-mix system should be implemented before or concurrently with payment rebasing.

IMPLICATIONS 8-3

Spending

- The approaches could be implemented in a budget-neutral manner and should not have an overall impact on spending.

Beneficiary and provider

- This recommendation would increase payments for hospital-based agencies, rural agencies, and small agencies. Patients who need therapy may see some decline in access, but these services would be available on an outpatient basis after the home health episode ended.

RECOMMENDATION 8-4

The Congress should direct the Secretary to establish a per episode copay for home health episodes that are not preceded by hospitalization or post-acute care use.

RATIONALE 8-4

Medicare's home health care benefit is unusual in that Medicare does not require beneficiary cost sharing, and this exception likely has contributed to the significant rise in utilization for these services. Adding a copayment would sensitize beneficiaries to the cost of the benefit. Existing policy mechanisms to guide appropriate home health use, such as provider or physician attestations of beneficiary need and eligibility for home health care, have had limited effectiveness. The cost-sharing requirement could exclude episodes with four or fewer visits and dual-eligible beneficiaries.

Under this recommendation, the Secretary would have the authority to set many key parameters for the copay. As discussed earlier, the amount of the copay should weigh several concerns, and this chapter offers an illustrative copay of $150 per episode. In setting the amount, the Secretary should consider that the rapid growth in these episodes suggests some overutilization but also that a copay set unduly high may dissuade some beneficiaries from seeking needed care or lead them to seek care in more expensive settings. The amount should be sufficient to discourage low-value episodes but not so high as to set a burden that is excessive. Ensuring that the copay does not create systematic access problems is critical. The Commission would carefully monitor changes in utilization after the implementation of a copay, with particular emphasis on changes in access and quality of care.

IMPLICATIONS 8-4

Spending

- A copay of $150 per episode (excluding low-use and post-hospital episodes) would reduce Medicare spending $250 million to $750 million in 2012 and $1 billion to 5 billion over five years. Expenditures for services would decrease because some beneficiaries who would otherwise use home health services might decline them. Since many of these services are funded by Part B, decreases in spending growth would reduce Part B premiums.

Beneficiary and provider

- Some beneficiaries might seek services through outpatient or ambulatory care, for which Medicare already has cost-sharing requirements. Some beneficiaries who need relatively few services would have lower cost sharing if they substituted ambulatory care for home health care. ■

Creating payment safeguards to protect beneficiary care during payment rebasing

Last year the Commission recommended that the home health prospective payment system (PPS) be modified to include payment corridors or other safeguards. A clearly defined unit of service is critical to a robustly functioning PPS. However, the home health product is not well defined, and the types of services received by beneficiaries with the same characteristics vary greatly. Adding profit-and-loss risk corridors or other cost-based reimbursement elements to the current PPS would address some of these concerns.

Under these approaches, agencies with high profits after rebasing would have to return some of their payments, and those with low margins would receive additional payments to compensate for a portion of their losses. Such transfers would reduce the incentive for high-margin agencies to increase profits by stinting and would protect agencies with lower margins for costs that may be beyond their control. The addition of a profit-and-loss corridor could also moderate the extremes of financial performance, partly compensating for the limitations of PPS in reimbursing for a service that is not well defined.

The safeguards could be based on how providers changed the delivery of care after the rebasing, with the goal of redistributing payments to providers that maintained relatively higher levels of service. Agencies that held their visits per episode steady relative to a pre-rebasing benchmark would have relatively favorable treatment under the safeguards, and those that reduced their visits would receive more restrictive treatment. For example, under the profit-and-loss corridors, the adjustment for agencies that did not reduce their visits per episode could be more generous.

Approaches that mix PPS and corridors or cost-based payment involve trade-offs because, while softening the impact of rebasing, they could weaken incentives for provider efficiency. Unlike the current PPS, agencies that were able to lower their costs would see their payments fall, because efficiency gains would result in lower provider revenue. However, the risk corridors could be set narrowly enough so that they would recover or compensate for only a small fraction of excessive profits or extreme losses above the corridor thresholds. This result would maintain some of the rewards and penalties for efficiency. Avoiding a system that relies too heavily on cost to set payments would not be prudent, as the cost-based system in effect in the early and mid-1990s proved vulnerable to abuse.

Recommendation 3B-2A from the Commission's March 2010 report

The Congress should direct the Secretary to expeditiously modify the home health payment system to protect beneficiaries from stinting or lower quality of care in response to rebasing. The approaches should include risk corridors and blended payments that mix prospective payment with elements of cost-based reimbursement. ■

Endnotes

1 This analysis reflects the current clinical and functional groupings of the PPS. A restructuring of these groups is likely to increase the explanatory value of the PPS. However, for this analysis the Commission analyzed the PPS using the current set of clinical and functional groups because it more closely follows the groups used for actual payments in 2008 and later years.

2 The analysis of the current and alternative system excludes outlier episodes. Reports from the Office of Inspector General and Government Accountability Office indicated that these episodes are susceptible to fraud, and consequently they should be excluded. CMS excluded outlier episodes when it developed the case-mix system in 2008.

3 This calculation also excludes episodes that qualified for outlier payment.

4 See Endnote 2.

References

Benjamin, A. E. 1993. An historical perspective on home care policy. *Milbank Quarterly* 71, no. 1: 129–166.

Chandra, A., J. Gruber, and R. McKnight. 2010. Patient cost-sharing and hospitalization offsets in the elderly. *American Economic Review* 100, no. 1 (March 1): 193–213.

Cheh, V., N. Duda, B. L. Carlson, et al. 2007. *Evaluation of the Home Health Independence Demonstration: Barriers to a successful experiment were multifaceted and difficult policy issues remain.* Prepared for the Centers for Medicare & Medicaid Services. Princeton, NJ: Mathematica Policy Research, Inc. October.

Department of Health and Human Services and Department of Justice. 2011. HEAT task force news. http://www.stopmedicarefraud.gov/HEATnews/index.html.

Feder, J., and J. Lambrew. 1996. Why Medicare matters to people who need long-term care. *Health Care Financing Review* 18, no. 2 (winter): 99–112.

Hopper, S. S., J. B. Foust, and D. Naik. 2009. *Findings from regional practice focus groups conducted for the initiative: Establishing a national framework for geriatric home care excellence.* Report prepared for the Center for Home Care Policy & Research at the Visiting Nurse Service of New York. New York, NY: Center for Home Care Policy & Research at the Visiting Nurse Service of New York.

McCall, N., J. Korb, A. Petersons, et al. 2003. Reforming Medicare payment: Early effects of the 1997 Balanced Budget Act on postacute care. *Milbank Quarterly* 81, no. 2: 277–303.

McCall, N., J. Korb, A. Petersons, et al. 2004. Decreased home health use: Does it decrease satisfaction? *Medical Care Research and Review* 61, no. 1 (March): 64–88.

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

Newhouse, J. P. 1994. *Free for all? Lessons from the RAND health insurance experiment.* Cambridge, MA: Harvard University Press.

Office of Inspector General, Department of Health and Human Services. 2001. *The physician's role in Medicare's home health services.* OEI–02–00–00620. Washington, DC: OIG.

RAND Corporation. 2006. *The health insurance experiment: A classic study speaks to the current health care reform debate.* Research highlight. Santa Monica, CA: RAND.

Rice, T., and K. Y. Matsuoka. 2004. The impact of cost-sharing on appropriate utilization and health status: A review of the literature on seniors. *Medical Care Research and Review* 61, no. 4 (December): 415–452.

Shorr, B. 2008. New PPS therapy strategies use OTs in the place of aides. *Home Health Line*, June 30.