



## The Impact of Medicare Home Health Policy Changes on Medicare Beneficiaries: Part II

This brief presents the results of a follow-up study (Murtaugh et al., 2003) on the effects of the Balanced Budget Act of 1997 on Medicare home health service use and beneficiary outcomes. [The results of the initial study (McCall et al., 2001) were discussed in a Spring 2003 policy brief and fact sheet.] The 2003 study found that the new payment systems have had a significant impact on the Medicare home health benefit: utilization declined, aggregate payments and payments per visit decreased (and then increased), the mix of services shifted, and the types of patients served appears to have changed. These results show that policy goals—in this case attempting to limit the use of the Medicare home health benefit while shifting services towards skilled care—can be instituted through changes in the payment system, though it is important to examine the impact of changes for possible unintended effects. Further study on the sustained impact of the current payment system—particularly on quality of care—is still needed.

**AUTHOR'S NOTE** - The content in this brief is based on: Murtaugh, C., McCall, N., Moore, S., & Meadow, A. (2003). Trends in Medicare home health care use: 1997-2001. *Health Affairs*, 22(5): 146-156.<sup>1</sup>

### Background

Significant growth in the use of the Medicare home health benefit occurred from the late 1980s through the middle of the 1990s.

- Total spending on the Medicare home health benefit grew from \$2 billion in 1988 to over \$16 billion in 1997 (Medicare Payment Advisory Commission, 1999; Murtaugh et al., 2003).
- The average annual increase was 25 percent from 1990 to 1997.
- By 1997, 1 in 10 Medicare enrollees used the

benefit with each user averaging 79 visits per year (Murtaugh et al., 2003).

- Medicare is the single largest payer of home health services, providing 40 percent of total home health payments (NAHC, 2000).

**The initial study by McCall et al. (2001) found decreases in the number of home health users, the average number of visits per user, and spending on home health but little evidence of problems with access or health outcomes.**

<sup>1</sup>A summary of this article was also published as: Ahrens, J. (2004). Home care payment changes in a post-BBA world. *Caring*, 23(4): 40-44.

## The IPS

- Remained a fee-for-service, cost-based system, but included an aggregate spending cap
  - The cap was based on the number of people served multiplied by *the average cost per beneficiary from several years earlier when utilization was lower*
- Phased in starting in October 1997; remained in effect for three years
- Resulted in a significant decline in utilization and spending

The original intent of the Medicare home health-benefit was to provide skilled care in the home. In addition to the significant growth of the benefit, however, it appeared that much of the increase was from long-term users who received a high proportion of home health aide visits. It was also found that the number of users—and the number of visits each user received—varied significantly by state.

**As the largest payor of home health services, changes in the Medicare benefit have a tremendous impact on the industry as a whole.**

In an attempt to rein in the growth as well as to refocus the benefit on short-term, skilled care, Congress passed the Balanced Budget Act of 1997, which resulted in the implementation of the Interim Payment System (IPS) and the Prospective Payment System (PPS).

## Results

The study found that the new payment systems affected how the Medicare home health benefit was being used. In other words, the new payment systems created incentives to providers that motivated them to change the way they provide home

## The PPS

- Replaced the IPS
- Went into effect in October 2000
- Consists of a fixed price system that gives providers the incentive to become more efficient
  - A set price per beneficiary per 60-day period is paid based on the “home health resource group (HHRG)” assigned to a home health user (and *not based on the number of visits or hours of service received*)
- Resulted in a slight increase in aggregate costs in the first year

## Data and Methods

The 2003 study used the same methodology as the original 2001 study to compare two years of newer data (FFY 2000 and FFY 2001) to the original data (FFY 1997 through FFY 1999).

[The study] combined Centers for Medicare and Medicaid services (CMS) claims data from the one percent sample of Medicare home health beneficiaries with information from the eligibility files. The study population is all Medicare Part A fee-for-service beneficiaries. All home health users from the one percent file and a random sample of nonusers are included in the analysis. (Murtaugh et al., 2003, p. 148)

health services. [Note: All the years identified in this section are federal fiscal years (FFYs). All data were taken from Murtaugh et al., 2003.]

## Utilization Declined Substantially

Utilization of the Medicare home health benefit dropped substantially after 1997, the last year of the original fee-for-service, cost-based system. The decline in utilization—including the number of home health users, the average visits per users, and total visits—was significant under the IPS and continued under the PPS.

- The number of home health users per 1,000 Medicare beneficiaries declined by almost one-third from 100.6 users per 1,000 beneficiaries to 69.8 users from 1997 to 2001 (see Figure 1). There was a 24 percent decline from 1997-2000, and an additional 8 percent decline after the first full year of the PPS (2001).
- The average annual visits per home health user dropped by 60 percent from 78.8 visits to 31.6 visits from 1997 to 2001 (see Figure 2).
- The total number of home health visits decreased 72 percent from 259.8 million to 71.9 million visits per year from 1997 to 2001.

## Aggregate Spending Decreased Significantly Under the IPS Then Increased Slightly Under the PPS

The decline in visits resulted in a 54 percent decrease in aggregate Medicare spending under the IPS, when providers were still paid on a fee-for-service basis. With the advent of the PPS when payments were no longer linked to the number of visits received, however, Medicare spending increased by 8.5 percent. Despite this increase, *the total was still half the amount of pre-BBA spending* (see Figure 3).

Figure 1: Users per 1,000 Beneficiaries

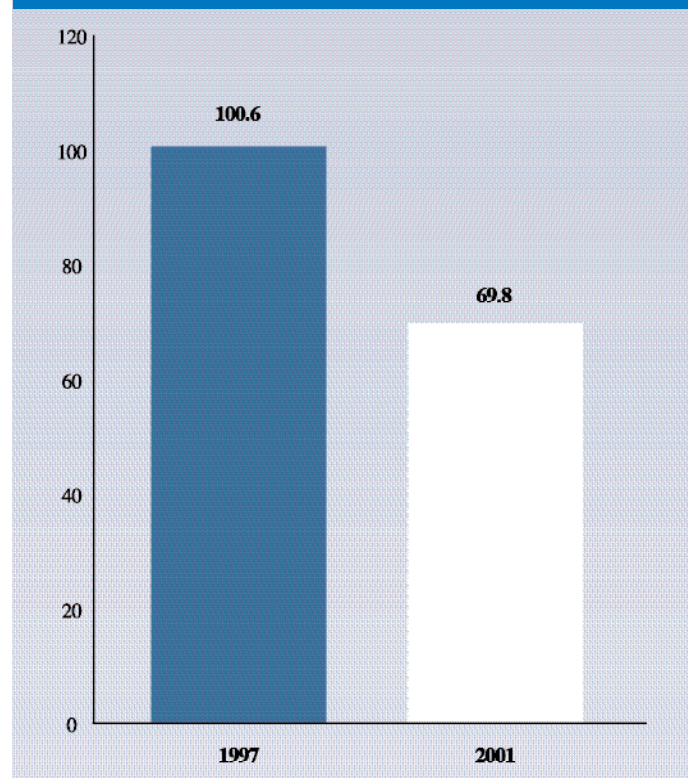
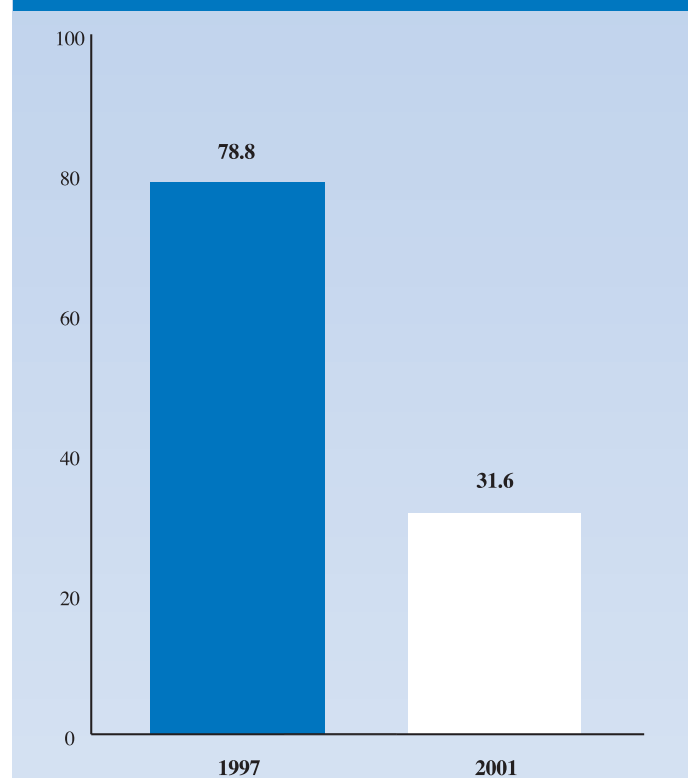
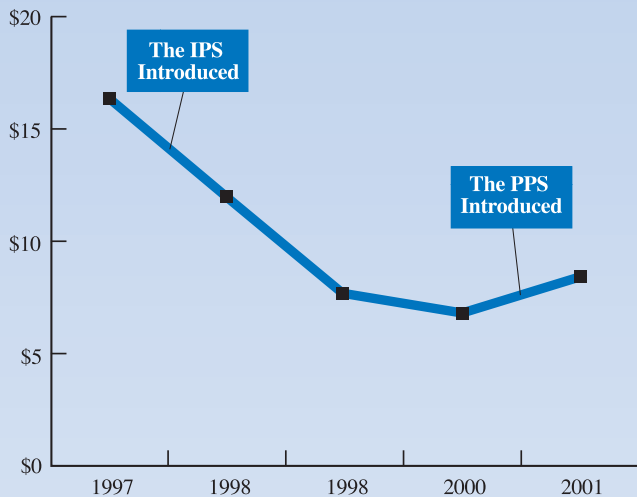


Figure 2: Visits per Home Health User



**Figure 3: Total Spending on Home Health Services (billions)**



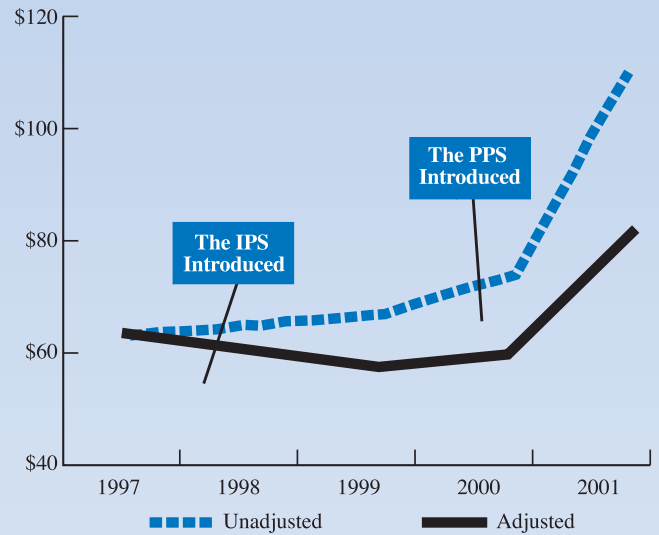
## Payments Per Visit Decreased Under the IPS Then Increased Under the PPS

Not only was aggregate Medicare spending affected by the payment system changes, but average payments per visit were affected as well. The average adjusted payment per visit decreased under the IPS because the drop in the average number of visits was not sharp enough to counter the effect of the payment cap. The average adjusted payment per visit increased in the first year of the PPS, as a result of higher payments under the new fixed priced system combined with a continued reduction in the average number of visits provided.

- Payment per visit<sup>2</sup> declined by 6 percent under the IPS (from \$63.02 to \$59.37) and then increased 38 percent (to \$82.18) under the first year of the PPS (see Figure 4).

<sup>2</sup>Adjusted for inflation and change in mix of disciplines.

**Figure 4: Payment per Home Health Visit**

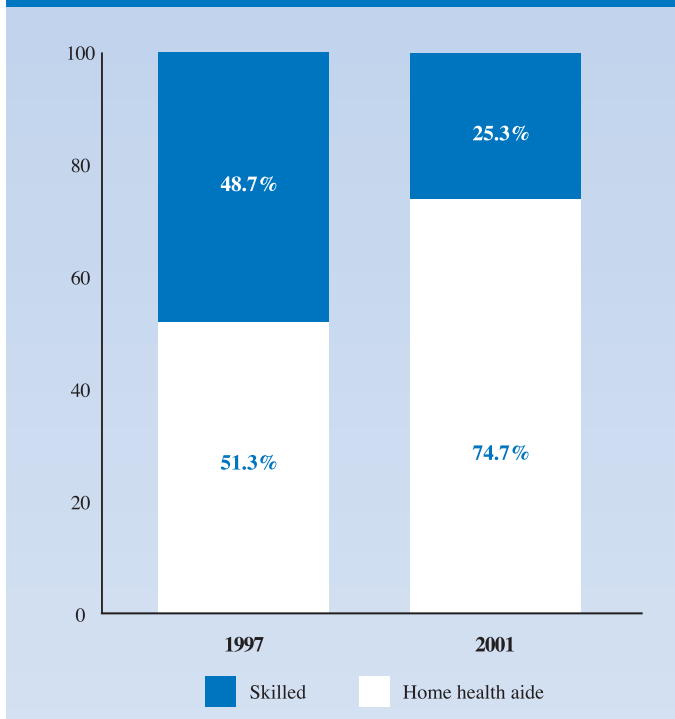


## The Proportion of Skilled Visits Increased

The payment system changes not only impacted the number of visits provided but also the type of visits. Though the mix of skilled and unskilled had been roughly even in 1997, by 2001 the majority of home health visits were skilled.

- The average number of visits by skilled workers decreased by 42 percent from 1997 to 2001, while the number of home health aide visits showed an even sharper drop (79 percent).
- This resulted in skilled visits and home health aide visits shifting from being roughly equal in proportion in 1997 to a mix of 75 percent skilled and 25 percent home health aide visits by 2001 (see Figure 5).
- There are higher payments for patients receiving ten or more physical therapy visits under the PPS; therefore, it is interesting to note that physical therapy visits did not show a decline (the total number of the physical therapy visits remained the same). Given the marked decrease in other visit types, physical therapy

**Figure 5: Percent Distribution of Home Health Visits**



visits increased significantly as a share of the total number of visits provided (increasing from 7.6 percent to 19.6 percent) from 1997 to 2001.

### The Mix of Diagnoses Changed

Under the PPS, payments are made based on the home health user’s HHRG. Certain diagnoses –including orthopedic, neurological, diabetes, and burn or trauma–increase a patient’s

“score” and can move them into a higher payment category. The data from the first year of the PPS show that the HHRG scoring system appears to have some impact on the reported diagnosis of home health users, though not necessarily on the type of patients admitted, and potentially on the amount and type of care being provided.

- The number of visits declined across the board from 2000 to 2001, but the rate of decline varied by the reported diagnosis of home health users.
- Though the aggregate annual payment increased 11 percent from 2000 to 2001, the changes in payment varied by reported diagnosis.
- The annual average payments for home health users in two diagnosis groups that increase the HHRG “score” (orthopedic and neurological) increased from 2000 to 2001, as did their proportion of the home health population.
- On the other hand, annual payments for home health users with a primary diagnosis of diabetes (which also increases the HHRG score) decreased even as home health users with the diagnosis increased from 2000 to 2001 (see Table 1).
- Some home health users with other diagnoses (e.g., heart failure) that showed smaller increases (or in some cases actual decreases) in mean annual payments decreased as a proportion of all home health users from 2000 to 2001.

**Table 1: Percent Change by Diagnosis Group (2000-2001)**

Diagnosis Group <sup>3</sup>	Annual Payments	Proportion of Home Health Users
Orthopedic	+41	+23
Selected neurological	+21	+14
Diabetes	-18	+17

<sup>3</sup>The diagnosis groups are not mutually exclusive.

## Further Research Questions

Further research is needed to determine the full extent of the impact of the PPS, as the study only described changes through the first year of the PPS. Outstanding questions about quality of care and access under the PPS include:

- 1) What is the composition of the current home health population (compared to the pre-BBA population)?
- 2) Do some beneficiaries with high care needs have reduced access?
- 3) Are these beneficiaries being cared for in alternative settings?
- 4) Are beneficiaries being denied services or receiving lower quality of services?
- 5) How has the drop in average number of visits affected patient outcomes?
- 6) How are beneficiaries with long-term care needs handled by the system?
- 7) How should these beneficiaries be handled?
- 8) What impact, if any, has the shortage in home health workers had on utilization?

## References

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THIS POLICY BRIEF WAS WRITTEN BY JOANN AHRENS.

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### THE HOME CARE RESEARCH INITIATIVE:

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The Home Care Research Initiative, a program of The Robert Wood Johnson Foundation, was established to support research and analysis that will improve the knowledge base underlying home care policy and practice. It is based at the Center for Home Care Policy and Research at the Visiting Nurse Service of NY.

CENTER FOR HOME CARE POLICY AND RESEARCH



VISITING NURSE SERVICE OF NEW YORK

107 EAST 70TH STREET NEW YORK, NEW YORK 10021

PH. 212.794.6300 FAX 212.794.6610

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