THE HOME CARE RESEARCH INITIATIVE: A PROGRAM OF THE ROBERT WOOD JOHNSON FOUNDATION

POLICY BRIEF

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The Impact of Medicare Home Health Policy Changes on Medicare Beneficiaries

This brief presents results from an analysis of how a new payment system -- the Interim Payment System (IPS) – mandated by the 1997 Balanced Budget Act (BBA) affected Medicare home health service use and beneficiary outcomes. The study found that the IPS had a considerable impact on home health utilization, causing reductions in the overall proportion of Medicare beneficiaries who received the service; the number of home health visits per home health user; the average length of a home health episode of care; and overall Medicare home health expenditures.[1] The study also examined the impact of these reductions on outcomes experienced by Medicare beneficiaries. Evidence presented in this brief shows that, overall, the impact of the IPS on beneficiary outcomes was minimal. Moreover, it appears that service reductions did not cause significant increases in the use of other types of post-acute care.

The IPS Provided a Natural Experiment on the Response to Payment Reductions

Home health is an important service for Medicare beneficiaries. In response to cost increases of 350% from 1990 to 1996 and concerns about fraud and abuse, federal legislation—the Balanced Budget Act (BBA) of 1997—called for changes in how home health care was reimbursed. Rather than paying home health agencies for each unit of service, Medicare would use a prospective payment system (PPS) that paid in advance a fixed amount for each episode of care. But until this system went into effect, an interim payment system (IPS) was used, which set a limit on aggregate per-beneficiary costs and tightened the per-visit cost limit already in place. The shift to the IPS provided

Data and Methods

Claims, provider, eligibility, and home health outcome and assessment data came from data files maintained by the Centers for Medicare & Medicaid Services (CMS). Information also came from surveys of Medicare home health users. Descriptive and multivariate analyses were conducted to examine utilization and outcomes before and after the implementation of the IPS. Multivariate analyses controlled for beneficiary, agency, and community characteristics.

[1] Details of this analysis can be found in a Center for Home Care Policy and Research fact sheet, *Medicare Home Health Use after the 1997 BBA.*

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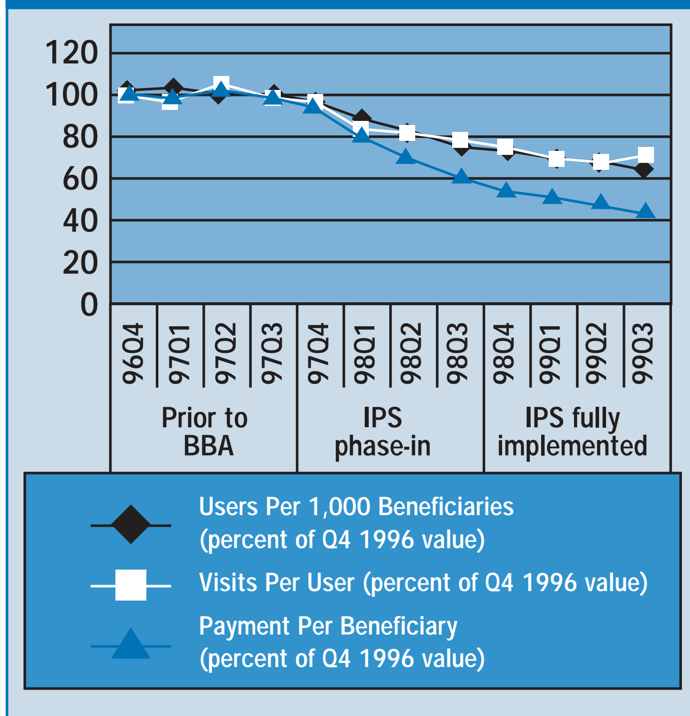
a natural experiment for examining how financial incentives affect service use and outcomes.

Rates of Service Use Decreased Dramatically

Although home health use rates had been relatively stable before the fourth quarter of 1997 when the phase-in of the IPS began, they started a deep downward trend with that quarter. There were reductions of nearly 40% in the number of users per 1000 beneficiaries; over 30% in the number of home health visits per user; and over 50% in home health payments per Medicare beneficiary (from October 1996 through September 1999 – see Figure 1). Episodes of care also became shorter, and there were changes in the mix of home health services delivered, with skilled care growing as a proportion of visits.

Figure 1: Home Health Utilization by Calendar Year Quarter, 1996-1999



There were some subgroups of Medicare beneficiaries who were affected more than others, but the additional reductions in utilization were small. The groups that experienced a larger reduction in their probability of using home health services included beneficiaries 85 or older, those in states with high historical Medicare home health use, and those also enrolled in the Medicaid program. Among those who did receive services, the groups that experienced greater decreases in the number of services were those that had higher than average use pre-IPS – groups that were also more likely to be using the home health benefit for personal care services.

Despite Dramatic Service Use Decreases, Beneficiaries Experienced Few Adverse Impacts

The study examined whether the IPS: 1) increased the frequency of adverse events (such as hospitalizations or emergency department use), 2) changed home health outcomes, and 3) changed the post-acute care utilization patterns and outcomes of patients discharged from hospitals. It compared FY 1997 (the last year before the IPS was implemented) with FY 1999 (the first full year of the IPS).[2] To control for changes over time in beneficiary and home health agency characteristics as well as other contextual factors, multivariate models were estimated.

There were both positive and negative changes in the incidence of adverse events.

Using a sample of all Medicare home health users in 1997 and 1999, the analysis examined changes in the proportion of home health beneficiaries expe-

[2] The Government fiscal year is October through September.

TABLE 1: Adverse Events 120 Days Following Admission to Home Care

Measure	No change	Decrease*	Increase
Avoidable hospitalizations	✓		
Acute hospital admissions	✓		
Acute hospital admissions for the same body system		✓	
Emergency room use			✓
Emergency room use for the same body system			✓
Mortality			✓
SNF admissions			✓
SNF admissions for the same body system	✓		

* Statistically significant at p = 0.0610.

riencing each of eight adverse events within 120 days of the home health admission (see Table 1). Although emergency room use, one measure of skilled nursing facility (SNF) use, and mortality were more frequent post-IPS, acute rehospitalizations for the same body system were less frequent, while SNF admission for the same body system and two measures of rehospitalization were unchanged. Because of the inconsistency of these results, the lack of differential impact on those with greater reductions in visits, and changes that may not have been fully controlled for in the analyses, it is difficult to conclude that these differences were the result of the IPS.

Home health outcomes and satisfaction were not harmed by the IPS.

Using a sample of selected home health agencies and other data sources, many outcome measures were examined (see Table 2), but only a few indicated decreases in the quality of care during the IPS. Although home health beneficiaries who received care post-IPS had more functional limitations at the beginning of an episode, their functional status was as likely to improve and more likely to stabilize (i.e., not worsen) than beneficiaries who received care before the IPS was implemented. Nor were beneficiaries' self-reported health status and symptoms negatively affected.

TABLE 2: Home Health Outcomes

Type and Number of Measure	No change	Decrease	Increase
Improvements in ADLs (5)	3	0	2
Stabilization of ADLs (5)	0	0	5
Improvements in IADLs (3)	3	0	0
Stabilization of IADLs (3)	1	0	2
Functional status at 120 days (10)	7	2	1
Improvements in clinical symptoms (9)	7	1	1
Stabilization of clinical symptoms (9)	1	0	8
Overall health and satisfaction (3)	1	2	0

Moreover, in general, satisfaction did not decrease during the IPS (Table 3). Seventeen survey questions measuring satisfaction with home health care and perceived quality of life were examined. In most areas no statistically significant changes were found. There were no differences in the questions addressing the technical quality of the care provided by staff, but some decreases in satisfaction were found for interpersonal aspects of care and quality of life. However, an increase was found in staff encouraging independence.

Following hospital discharge, no patterns of adverse outcomes were observed.

The study looked at changes between 1997 and 1999 in what happened to all Medicare beneficiaries who were discharged from inpatient care with selected diagnostic-related groups (DRGs) – stroke, chronic obstructive pulmonary disease (COPD), heart failure, fractured hip, and diabetes – and found that patterns of post-acute care had changed. Beneficiaries used fewer home health services following hospital discharge, while discharges using no post-acute care of any kind increased from 41% to 46%. In addition, in the 180 days following hospital discharge, there was a small rise in the number of days beneficiaries spent in rehabilitation facilities and long-term care hospitals. Of the 90 potential adverse events examined (five DRGs, six outcomes, three time periods from hospital discharge) only eight were statistically significant – three adverse events occurred less frequently, while five occurred more frequently. This small number of findings could easily have occurred by chance. Of the five measures having worse outcomes, three were for

TABLE 3: Satisfaction and Quality of Life

Satisfaction Measures	No change	Decrease	Increase
Would recommend agency to friend or family	✓		
Satisfied with care received from agency	✓		
Discharged too soon	✓		
Needed home services after discharge – not available and a big problem	✓		
Did not arrive late		✓	
Did not rush though work		✓	
Encouraged independence			✓
Paid attention to patient	✓		
Provided reassurance and emotional support		✓	
Aide did not come often enough	✓		
Nurse or therapist did not come often enough	✓		
Gave clear explanations of medical condition and treatment	✓		
Provided excellent teaching about care	✓		
Visits were long enough all of the time	✓		
Were careful and thorough in examination and treatment	✓		
Satisfied with life		✓	
Satisfied with personal care arrangements		✓	

TABLE 5: Post-Hospital Adverse Events
(Each event examined for five DRGs at three time periods*)

Measure	No change	Decrease	Increase
Acute hospital admission	15	0	0
Acute hospital admission for the same body system	15	0	0
Avoidable hospitalization	14	1	0
Emergency room use	14	1	0
Emergency room use for the same body system	12	1	2
Mortality	12	0	3

* The five diagnostic related groups (DRGs) were stroke, COPD, heart failure, hip fracture, and diabetes, examined at 60, 120, and 180 days following hospital discharge.

increased mortality. These findings would be troubling if they actually were an effect of the changes in post-acute service use brought about by the BBA, but such a conclusion would require more study, including an examination of clinical information.

Policy Implications

Evidence from this study suggests that the Medicare home health changes embodied in the IPS achieved their goal: to move the benefit away from the provision of long-term personal care services and return it to a focus on nursing care and rehabilitation. The findings also demonstrate that home health agencies respond strongly to financial incentives.

There appear to have been few negative impacts associated with the IPS, despite dramatic service use reductions. The IPS does not appear to have adversely affected Medicare home health beneficiaries, nor did it result in an increase in adverse outcomes following hospital discharge for selected conditions.

This study suggests the importance of better understanding what home care provides and in quantifying the circumstances in which it is an appropriate service for public funding. To the extent that there is a gap between what is available through public financing and what is needed or desired, individuals will need to plan for self-funding or purchase long-term care insurance.

More information about this research can be found in the following publications:

McCall, N., Korb, J., Pertersons, A., and Moore, S. 2003. Decreased Home Health Use: Does it Decrease Satisfaction? Medical Care Research and Review, forthcoming.

McCall, N., Korb, J., Pertersons, A., and Moore, S. 2003. Reforming Medicare Payment: Early Effects of the 1997 BBA on Postacute Care. *The Milbank Quarterly*, 81(2): 277-303.

McCall, N., Petersons, A., Moore, S., and Korb, J. 2003. Utilization of Home Health Services Before and After the BBA of 1997: What Were the Initial Effects? *Health Services Research,* 38:85-106.

Komisar, H.L. 2002. Rolling Back Medicare Home Health. *Health Care Financing Review,* 34(2): 33-55.

McCall, N., Korb, J., Pertersons, A., and Moore, S. 2002. Constraining Medicare Home Health

Reimbursement: What Are the Outcomes? *Health Care Financing Review,* 34(2): 57-76.

McCall, N., Komisar, H., Petersons, A., and Moore, S. 2001. Medicare Home Health Before and After the BBA. *Health Affairs* (20) 3:189-198.

The following reports can be obtained from Laguna Research Associates:

- Final Report: Direct and Indirect Effects of the Changes in Home Health Policy as Mandated by the Balanced Budget Act of 1997.
- Study of the Impact of Monitoring the Health Outcomes for Disabled.
- Medicare Home Health Before and After the BBA.

The following report is available from Mathematica Policy Research:

- Cheh, V.L. and Black W. 2002. Did the Balanced Budget Act of 1997 Affect the Quality of Medicare Home Health Services?

The following report is available from Georgetown University:

- Rogers, S.R. and Komisar, H.L. 2002. Effects of the Balanced Budget Act on Medicare Home Health Agencies, Services, and Clients: Findings from Interviews with Home Care Associations and Agencies. Working Paper IWP 02-100, Institute for Health Care Research and Policy, Georgetown University, Washington, DC.

THIS POLICY BRIEF WAS PREPARED BY NELDA McCALL

AND JODI KORB OF LAGUNA RESEARCH ASSOCIATES

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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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