Medicare: Making It a Force for Innovation and Efficiency

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ABSTRACT: An aging population, the addition of a prescription drug benefit, and federal budget deficits require policymakers to continue to explore ways to improve Medicare. Because Medicare is such a large share of health care spending, initiatives to improve its efficiency and the quality of care it funds will potentially influence the health care system as a whole. Current strategies to improve the quality of care and efficiency of the program focus on getting beneficiaries to migrate to better-performing providers, or intervening more directly to encourage the system to provide higher quality, more efficient care. Some strategies try to increase information sharing overall, some focus primarily on providers or beneficiaries, while others target specific diseases.

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Introduction

Health care costs have been rising rapidly for Medicare just as they have for the rest of the population. From 2000 to 2004, total Medicare benefit payments per enrollee grew at average rate of 7 percent per year.1 Evidence on variation in Medicare spending, service use, and quality of care across geographic regions and among various types of beneficiaries point to opportunities to improve care efficiency and quality. Because Medicare is such a large share of health care spending,2 initiatives to improve its efficiency and the quality of care it funds will potentially influence the health care system as a whole.

Variations in Spending, Service Use, and Quality

Geographic Variations

Spending per beneficiary in fee-for-service Medicare varies widely by location, suggesting inefficiency. Among urban areas, spending in 2000 ranged from $3,500 in Santa Fe, New Mexico, to about $9,200 in Miami, Florida.3 After adjusting for differences in the health of beneficiaries and

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the amount providers pay for wages, rent, and the like, researchers still find substantial spending differences resulting from variation in the use of services. Even within geographic areas, there is evidence of both overuse and underuse of services.

- Beneficiaries in high-spending geographic areas use more of some types of services, such as intensive hospital care or specialty visits, but do not experience better quality of care, better outcomes, or more satisfaction than their counterparts in low-spending areas. For these kinds of services, use increases as the supply of services grows, expanding to include cases for which there is weaker evidence of the effectiveness of these services.

- Recent studies show nationwide underuse of some effective services. In one study, for example, Medicare beneficiaries were found to receive certain known, effective services less than two-thirds of the time than warranted for common conditions such as heart disease, breast cancer, diabetes, and stroke.

Medicare’s challenge is to reduce the use of ineffective or inappropriate services and increase the use of appropriate and effective underutilized services. Achieving this will be complicated because consensus on the amount of care that is appropriate and the impact of the price Medicare pays for that care does not always exist.

**Variations Among Beneficiaries**

In any given year Medicare spending is highly concentrated among a small portion of beneficiaries. For example, in 2002 the top 5 percent of fee-for-service beneficiaries accounted for almost half of all dollars spent in fee-for-service Medicare, and the top quarter represented nearly 90 percent of all fee-for-service expenditures (Figure 1).

Many of the high-spenders are the chronically ill. Almost 80 percent of all beneficiaries have at least one chronic condition (Figure 2), but the 20 percent of beneficiaries with five or more chronic conditions account for two-thirds of Medicare spending. About one-quarter of beneficiaries with at least one of three conditions—congestive heart failure, chronic obstructive pulmonary disease, and diabetes—account for about 60 percent of Medicare’s fee-for-service spending.

Not surprisingly, the chronically ill see more doctors, have more visits, have more hospital stays, and use more prescription drugs than the average beneficiary. Beneficiaries with five or more chronic conditions have more than twice as many total office visits and physicians caring for them in a
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year than the average beneficiary, and they have five times as many prescriptions filled than those with no chronic conditions.

Many hospitalizations among the chronically ill are preventable. The Agency for Health Care Research and Quality estimates that about 800,000 hospital admissions for beneficiaries with CHF in 1999 could have been avoided with better outpatient management of their conditions. The costs associated with these admissions totaled $4.6 billion, which was 2.3 percent of total Medicare spending ($209 billion) in 1999.

It is widely believed that the health care system and Medicare often fail to meet the complex needs of the chronically ill. The fragmented care system, and the fact that high spending beneficiaries who survive tend to remain high spenders over long periods of time, suggest that targeting care coordination interventions to this group of beneficiaries could be effective in improving the quality of their care and decreasing costs.

Strategies for Strengthening Efficiency and Quality

Many factors affect care efficiency and quality: the supply of services, provider training and preferences, local standards of care, financial incentives for providers and beneficiaries, patient demands for care.

The precise role of each factor and how they interact is not well established. In addition, the medical system and Medicare were not designed to support care coordination or to reward quality and efficiency:

- Beneficiaries see an average of six physicians, and the mean total of prescription medications per enrollee is 4.7. These averages are heavily influenced by the chronically ill, who see many more physicians and fill more prescriptions than their healthier counterparts.
- Information sharing across providers is frequently poor, and evidence-based practices do not exist for many conditions, especially for treatment of multiple chronic conditions.
- Medicare’s benefit package lacks cover-
age for many services needed to maintain or stabilize conditions and Medicare does not reimburse providers for care coordination activities. (An important coverage gap was filled with the addition of prescription drug coverage in 2006.)

- Multiple sources of coverage can create administrative inefficiencies for Medicare, providers and beneficiaries. Ninety percent of beneficiaries have more than one source of coverage (Figure 3).

Current strategies to improve the quality of care and efficiency of the program focus on getting beneficiaries to migrate to better-performing providers, or intervening more directly to encourage the system to provide higher quality, more efficient care. Some strategies try to increase information sharing overall, whereas others focus primarily on providers or beneficiaries. Some target specific diseases.

**Disease Management**

Disease management targets individuals with a specific chronic condition that is their main health problem. The aim is to prevent a decline in health and increased expensive care through prevention and early identification of problems. The targeted conditions—such as asthma, diabetes, and congestive heart failure—typically have well-established, evidence-based treatment guidelines, and patient self-care and compliance are important factors in managing the condition. Members of a targeted population tend to have a standard set of care needs.

Disease management activities are single-disease focused and commonly involve patient education, monitoring beneficiaries’ conditions against standards, and coordinating care across providers. Many different entities may provide disease management services, including health plans, hospitals, provider offices, and firms specializing in disease management programs.

Three-quarters of large employers reported in 2002 that they offered some form of disease management in their benefit plan for their active employees. Nearly half of all states have implemented or are implementing disease management programs for Medicaid.

**Case Management**

Case management programs target individuals with complex and intense care needs that put them at risk for bad outcomes and costly hospitalizations. Targeted individuals usually have complex and diverse medical and social vulnerabilities that are
medical costs failed to improve client self-care or reduce Medicare spending in the early 1990s.\textsuperscript{34}

In contrast, an intervention to help elderly patients with congestive heart failure manage their care after hospital discharge has been shown to reduce hospital readmissions.\textsuperscript{35} Intensive programs to support diabetics’ adherence to treatment regimens in the private sector can be effective in avoiding or delaying the onset of complications, although findings on cost savings are unclear.\textsuperscript{36}

Despite these mixed results, a recent comprehensive review of care coordination programs concluded that care coordination has the potential to reduce utilization while maintaining or improving quality within the existing health system, and suggested that there are effective ways to coordinate care.\textsuperscript{37} Because high-cost beneficiaries with chronic conditions have many expensive hospital stays, strategies to improve care coordination and self-management for this group have the greatest potential.\textsuperscript{38} Disease management and case management programs may allow Medicare to improve chronic care without increasing costs.\textsuperscript{39}

Comparing Medicare beneficiaries to the commercially insured, Medicare beneficiaries have more complex conditions, are more likely to be poor, frail, and cognitively impaired. Medicare’s strength is that beneficiaries remain in Medicare once enrolled, so the program benefits from both short-term and long-term improvements in health and efficiency. These factors affect the design of strategies, and make it difficult to translate private-sector efforts and findings to Medicare. The Centers for Medicare and Medicaid Services (CMS) has begun testing a number of strategies.

**Medicare Prescription Drug, Improvement and Modernization Act of 2003**

The Medicare Prescription Drug, Improvement and Modernization Act (MMA, PL. 108-173), includes several provisions to test mechanisms designed to improve quality of care and reduce...
costs for chronically ill beneficiaries. Most initiatives are required to be budget neutral.\textsuperscript{40}

The chronic care improvement program (CCIP) aims to improve care and save money by providing ongoing care coordination across providers, using care management plans, teaching participants self-care techniques,\textsuperscript{41} and promoting the use of evidence-based treatment guidelines for fee-for-service beneficiaries with congestive heart failure, complex diabetes, or chronic obstructive pulmonary disease. Enrollee participation is voluntary.\textsuperscript{42} Contracts have been awarded for nine pilot projects for a three year period beginning December 2004. The fee paid to the contractor is contingent upon meeting quality, satisfaction, and savings targets. Contractors are required to save the program a minimum of 5 percent of health care costs, net of the program fees. If performance targets are met, CMS can expand the program to other areas without congressional authorization.

The pay-for-performance demonstration provides incentives to physicians to improve care management for fee-for-service beneficiaries with one or more selected chronic conditions. The aim is to stabilize medical conditions, limit acute episodes that result in expensive hospitalizations, and reduce adverse outcomes, such as drug interactions. Physicians who meet performance standards receive a fixed payment for each member. The three-year demonstration will operate in four sites.

The capitated disease management demonstration pays organizations a fixed sum per beneficiary in return for providing disease or case management services and all Medicare-covered benefits to beneficiaries with select chronic illnesses, such as stroke, congestive heart failure, or diabetes, and to frail elders or beneficiaries with Medicare and Medicaid coverage.\textsuperscript{43}

Other MMA provisions affecting chronic care:
• require sponsors of the Part D prescription drug plans to establish drug therapy management programs for members with multiple chronic conditions,
• direct the Secretary of Health and Human Services to develop a plan to improve care for the chronically ill,
• require a demonstration of hospice care in rural areas where none exist, and
• authorize the Institute of Medicine to evaluate performance measures

Other Programs\textsuperscript{44}

The Medicare disease management demonstration tests whether disease management services combined with prescription drug benefits improves care and saves money for fee-for-service beneficiaries with advanced-stage congestive heart failure, diabetes, or coronary artery disease. Enrollment in demonstration sites began in February 2004.\textsuperscript{45} The physician group practice demonstration is designed to encourage care coordination, promote efficiency through investment in administrative structure and process, and to reward physicians for improving health outcomes. Eleven group practices are expected to participate.\textsuperscript{46} These two demonstrations were mandated by the Medicare, Medicaid and SCHIP Benefits Improvement & Protection Act of 2000 (BIPA; P.L. 106–554).

The coordinated care demonstration tests the impact of various care coordination approaches—including both case and disease management—on quality and expenditures in the fee-for-service program.\textsuperscript{47} Fifteen programs targeting frail, elderly, and chronically ill Medicare beneficiaries operate in both urban and rural settings. This demonstration was mandated in the Balanced Budget Act of 1997 (P.L. 105–33). The intensive case management demonstration in Albuquerque, New Mexico (2001–2004) tests whether case management for high risk individuals with congestive heart failure and diabetes improves clinical outcomes, quality of life, and satisfaction.\textsuperscript{48} The end stage renal disease (ESRD) disease management demonstration tests the ability to improve quality of care in the fee-for-service program, traditional managed care plans, and special health plans that use interdisciplinary
care teams. It was authorized by OBRA 1993 (P.L. 90-248); the sites have not yet been awarded.

CMS has also proposed to extend efforts by Medicare’s quality improvement organizations (QIOs) to address the care of patients with multiple conditions. Beginning in August 2005, QIOs may be required to assist physician offices in providing chronic care for congestive heart failure, hypertension, depression, and coronary artery disease, and also to help physician offices adopt electronic prescribing to reduce misuse of prescription drugs.

CMS demonstration programs target conditions that are most likely to show short-term effects and savings. They also are designed to explore how to identify and target beneficiaries; identify and implement interventions that improve health and lower costs; and reward effective and efficient care. Challenges include integrating findings from these trials, avoiding duplication of effort across demonstrations, and determining how success will be measured. In addition, these demonstrations do not directly address the issue of how to share information among providers and programs (both within Medicare and with other insurers) to support coordinated care while still protecting beneficiaries’ privacy.

Conclusion
An aging population, the addition of a prescription drug benefit, and federal budget deficits require policymakers to continue to explore ways to improve Medicare. Medicare’s size makes it possible to consider and test options for improvement that smaller programs cannot.

NOTES

1 Centers for Medicare and Medicaid Services, Office of the Actuary (data obtained May 2005).


3 These figures are for the metropolitan statistical area (MSA). They are not adjusted for input factor prices such as differences in wages. Adjustment for these factors reduces the variation, but significant differences remain. More detail on these adjustments and the implications of variation are described in MedPAC. June 2003. “Geographic Variation in Per Beneficiary Medicare Expenditures.” Chapter 1 in Report to Congress: Variation and Innovation in Medicare. Washington, DC: MedPAC. www.medpac.gov.

4 Less than half of the variation is due to differences in population characteristics (age, sex, and health status) and the price of services. This conclusion is based upon the literature analyzing Medicare’s geographic spending variations reviewed in M. Gold. July 2004. Geographic Variation in Medicare Per Capita Spending: Should Policymakers Be Concerned? Research Synthesis Report no. 6. Robert Wood Johnson Foundation. www.policysynthesis.org.


6 Fisher and colleagues estimate that beneficiaries in high-spending areas receive 60 percent more care for three conditions—hip fractures, colorectal cancer, and acute myocardial infarction (heart attack). (E. Fisher et al. February 2003. “The Implications of Regional Variations in Medicare Spending, Part 1: The Content, Quality, and Accessibility of Care.” Annals of

One study found that total Medicare spending could be reduced by as much as 30 percent, without lowering quality of care, since quality does not appear to be better in high-spending areas (J. Wennberg et al. February 2002. “Geography and the Debate Over Medicare.” Health Affairs Web Exclusive, February 13, 2002. www.healthaffairs.org; E. Fisher et al., February 2003.) This estimate assumes that Medicare spends the same amount for every beneficiary (the average cost for a beneficiary in low-spending areas). However, the situation is complicated because just reducing spending does not assure that only ineffective services will be eliminated. In addition, some effective services are being underused across all geographic areas.

Wennberg and colleagues call these “supply-sensitive services” (J. Wennberg et al., February 2002). Many researchers have shown the positive association between the supply of providers and use. For a summary of evidence see M. Gold, July 2004.


Ways and Means, U.S. House of Representatives. 107th Congress, 2nd sess. Other analyses of claims generally find the same figures. For example, Berenson and Horvath found that nearly 80 percent of Medicare beneficiaries have at least one of the following chronic conditions: stroke, diabetes, emphysema, heart disease, hypertension, arthritis, osteoporosis, Parkinson’s disease, or urinary incontinence (cited in N. Super. May 2004. Medicare’s Chronic Care Improvement Program: What Is Its Potential? Issue Brief no. 797, National Health Policy Forum, www.nhpf.org). MedPAC notes that the number of beneficiaries with multiple chronic conditions may be even higher, as over 70 percent of beneficiaries self-report having two or more chronic conditions (MedPAC, June 2004b. “The Medicare Modernization Act and Chronic Care Improvement.” Chapter 2 in Report to Congress: New Approaches in Medicare. Washington, DC: MedPAC. www.medpac.gov.)

MedPAC. June 2004b.


This figure does not include the costs of physician services billed separately. S. Foote, July 2003.

receive recommended care about half the time.

Analysis of FFS claims over 1996–2002 shows that more than 50 percent of beneficiaries in the top quartile of spending in the base year remained in the top quartile in the subsequent two years, even including those who died during the two years (MedPAC, June 2004b). Because of deaths, this percentage will fall as the period considered lengthens.


A. Short et al., October 2003.


A. Chen et al., March 2000.

MedPAC, June 2004b.

Information for this section is drawn from P. Keenan and J. Kline’s brief, Paying for Performance, prepared for the January 2004 Bipartisan Congressional Health Policy Conference unless otherwise noted. It can be found at http://www.cmwf.org/publications/publications_show.htm?doc_id=247163.


A. Short et al., October 2003.


S. Foote, July 2003.

A. Chen et al., March 2000.


Budget neutral means that program spending can not exceed what would have been spent in the program’s absence.

MMA also directs the CCIP program sites to provide information about hospice care, pain and palliative care, and end-of-life care (Sect 721).

CCIP pilots will be implemented in areas where, in the aggregate, 10 percent of Medicare beneficiaries live. They will not operate in the same geographic areas as existing Medicare FFS chronic care demonstrations to avoid cross-contamination of control groups. N. Super, May 2004.


These demonstrations are described in MedPAC, June 2004b. Descriptions are also available on the Centers for Medicare and Medicaid Web site: www.cms.gov.


The demonstration is pending waiver approval, which is anticipated in 2005.


This demonstration operated from November 2001 to November 2004 in Lovelace Health Systems in Albuquerque, New Mexico. It was implemented under CMS’s own demonstration authority.
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