

Chronic Illness in Our Seniors:

The Cost and Quality Challenges, and the Hope of the Medicare Health Support Pilot

Birdie D'Andrea and Katharine D. Darst

The Medicare program faces significant challenges in its ability to assure access to needed care as expenditures are projected to increase more rapidly than tax revenues. Changing demographics highlight the need to devise better ways to care for the chronically ill if we are going to control health care spending in the future.

An Aging Population, an Increased Disease Burden

Seniors with chronic conditions associated with high medical expenditure and utilization are vulnerable to experiencing poor quality outcomes from a disparate health system lacking in prospective self-care strategies. The May 2005 Congressional Budget Office (CBO) paper estimated that 25 percent of Medicare beneficiaries accounted for 85 percent of Medicare health care expenditures, with average expenditures of about \$24,800 per beneficiary.¹ The report also noted that beneficiaries incurring the highest health care expenses have four or more of seven major chronic conditions, including heart failure, diabetes, chronic obstructive pulmonary disease, asthma, hypertension, coronary artery disease, and cerebrovascular disease. The least expensive 50 percent of Medicare beneficiaries accounted for only 4 percent of total health care spending—a trend that is expected to continue—averaging about \$550 per beneficiary per year. Figure 1 shows the projections by the Centers for Medicare and Medicaid Services (CMS) for

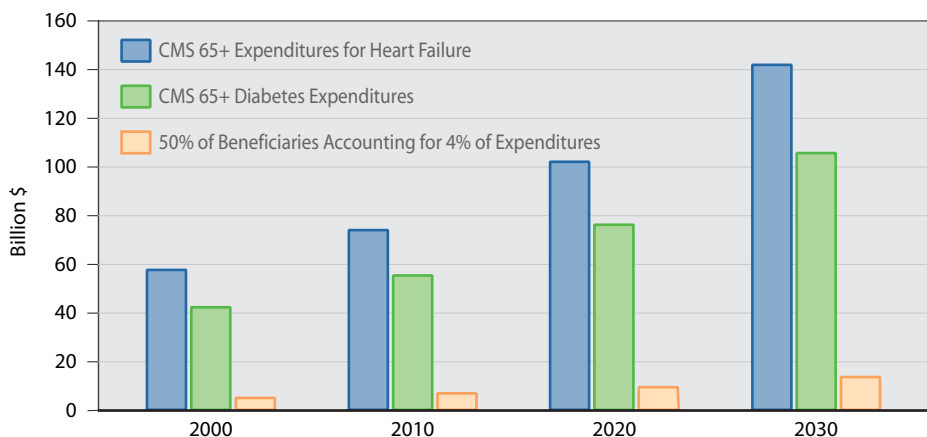
certain expenditures for beneficiaries age 65 and older through 2030.

Medicare beneficiaries with chronic conditions are the highest cost and fastest growing health care service group. Since 1990, life expectancy has increased over 44 percent and is projected to continue to increase.^{2,3} As baby boomers join the 65 years and over population between 2000 and 2030, this age group is expected to grow faster than any other age group in every state, with half of the states in America doubling the 65 and over population during this time frame. Figure 2 shows the CMS projections of the growth of the Medicare-eligible population through 2030.

While the Academy of Sciences 2001 report showed a decrease in disability rates among the elderly, the prevalence of those with one or more chronic illnesses has not decreased.⁴ In fact, it is expected to increase by approximately 37 percent from 2000 to 2030. Others have estimated that as many as 89 percent of those 65 and older in the U.S. have one or more chronic

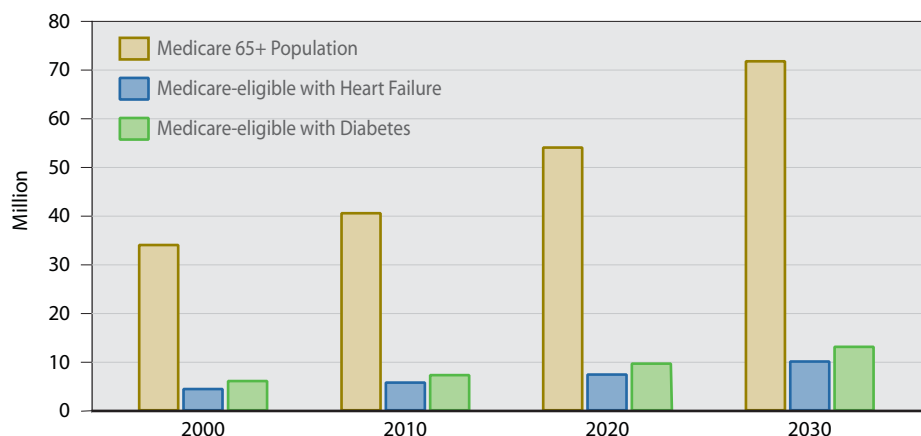


New models of care are needed to reduce health care costs and ensure better outcomes for seniors with chronic illness.



Source: Based on Partnership for Solutions and Congressional Budget Office Report, May 2005.

Figure 1. Projected CMS expenditure for heart failure and diabetes.



Source: Based on data from the CMS Web site.

Figure 2. CMS projections: growth in Medicare-eligible population.

illnesses and that 25 percent have four or more conditions, including coronary artery disease, diabetes, heart failure, or chronic obstructive pulmonary disease.⁵

While the acute care delivery model has proven to be effective in treating individual episodes of illness, it was not designed to address the multi-dimensional cost and quality concerns associated with patients that have a chronic illness or those with

multiple chronic conditions. The 2000 Partnership for Solutions survey reported that Americans biggest concerns in getting sick or having a chronic condition include an inability to pay, the loss of independence, and becoming a burden to family and friends.⁶ In spite of providers' best intentions, the current acute care delivery model results in seniors with chronic conditions experiencing their worst fears. As compared to other Medicare beneficiaries, those with five or

more chronic conditions are more likely to be admitted to the hospital or a skilled nursing facility, have higher emergency room utilization, consult more physicians, and fill more prescriptions each year.⁷ Individual out-of-pocket expenses for Medicare beneficiaries with chronic conditions are estimated to average \$1,487 per year, which is about five times higher than other beneficiaries' average (which is estimated to be about \$200 per year).⁸ This survey also revealed that about 9.4 million Americans of all ages provide care to relatives with chronic conditions, not only to assist with personal care, but to help access services and navigate the health care maze and to coordinate care among multiple providers and across multiple health care settings.

Chronic Care Quality Concerns

A 2001 study conducted by Anderson and Knickman showed that care for chronic illnesses has become the most common reason why Americans seek medical care. Yet surveys indicate that providers do not feel adequately prepared to provide care for chronic illnesses.⁹ A 2002 study by Wolfe, et al., showed that those with four or more chronic conditions are 99 times more likely to be hospitalized for a potentially preventable condition than those without multiple chronic conditions.¹⁰ Not surprisingly, data from many sources show that care provided in our acute, episodic model is not cost effective and leads not only to disproportionate health care expenses but also to poor outcomes for those with chronic conditions.¹¹

For example, heart failure is a leading cause of morbidity and mortality among Medicare beneficiaries and a major contributor to health care costs in the Medicare population. In 2000, 14 percent of Medicare

beneficiaries with heart failure accounted for 43 percent of Medicare's total health care spending.¹² Prevalence of heart failure is age-related, with approximately 10 percent of octogenarians having abnormal cardiac function. Heart failure is the most common reason for hospitalization among the Medicare population, accounting for 5 to 10 percent of all admissions and having a 90-day readmission rate approaching 30 percent. Although a myriad of multi-national studies and evidence-based guidelines have been well documented and updated since 1996 by the American College of Cardiology (ACC), the American Heart Association (AHA), the Institute of Medicine, and others, a large gap continues to exist between knowledge and practice.^{13,14}

Diabetes is the leading cause of kidney failure, blindness, and amputations, and its occurrence is rising rapidly due to both age-related prevalence and increasing environmental factors such as obesity and sedentary lifestyles. In 2000, 18 percent of Medicare beneficiaries with diabetes accounted for 32 percent of total health care spending.¹⁵ Over half of the estimated \$132 billion spent on direct and indirect costs associated with diabetes and related chronic complications are incurred by those 65 and over.¹⁶ In spite of the availability of evidence-based guidelines from the American Diabetes Association (ADA) for the prevention and treatment of diabetes and studies in the U.S. and abroad showing that improved glycemic control reduces the risks of complications and can even prevent them, studies indicate that diabetic care throughout the U.S. remains suboptimal.^{17,18,19,20}

The national call for improved quality of care in the U.S. has intensified as increasing amounts of public data indicate sub-

stantial gaps between the care people should receive and the care they actually receive. Variations in care persist regardless of dissemination of clinical guidelines and public availability of performance information. Medical costs continue to increase regardless of cost containment efforts. As a result, questions persist about the impact that changing incentives and varying delivery methods could have on both quality and the cost of care delivered across the health care continuum. Successful efforts to reduce health care costs

... care for chronic illnesses has become the most common reason why Americans seek medical care. Yet surveys indicate that providers do not feel adequately prepared to provide care for chronic illnesses.

significantly without negatively impacting quality or accessibility need to focus on improving chronic care for the small, but growing, percentage of beneficiaries 65 and older who incur the highest utilization rates and costs.

CMS conducts and sponsors many demonstration projects to study the impact of new methods of service delivery, coverage of new types of services, and new payment approaches on beneficiaries, providers, health plans, states, and the Medicare Trust Fund. In recognition of the need to identify quality-oriented, cost-effective strategies for beneficiaries afflicted with chronic conditions, Congress included the

provision for the Voluntary Chronic Care Improvement Program for Fee for Service beneficiaries as a component of the Medicare Prescription Drug Improvement and Modernization Act of 2003.²¹

The Medicare Health Support Pilot

The chronic care improvement pilot, named "Medicare Health Support," (MHS) is a large-scale, three-year randomized trial in which Medicare Fee-For-Service (FFS) beneficiaries have been invited to participate in one of eight regional programs. Medicare Health Support Organizations (MHSOs), the entities implementing the program selected through a proposal and on-site evaluation process, include insurance companies, disease/care management vendors, and several combined entities consisting of existing or newly forged partnerships.

By CMS mandate, MHSOs have targeted regions where Medicare FFS beneficiaries have high prevalence rates of complex diabetes and heart failure (threshold conditions) and low Medicare quality ratings. Using historical medical claims, CMS has identified beneficiaries with the threshold conditions, assigning 20,000 to the intervention group and 10,000 to the control group per region. Although beneficiary participation is voluntary, MHSOs are contractually at risk for improving the financial outcomes for all beneficiaries identified as candidates for intervention, independent of participation status.

Senior-centric, Holistic Programs

The term *disease management* (DM) has a range of connotations in the provider community. In an effort to facilitate industry standards and distinguish comprehensive initiatives from the superficial "pills and pamphlets" programs prevalent in the na-

scent days of DM, the Disease Management Association of America (DMAA), a coalition of industry stakeholders, ascribes to the following definition:

Disease Management is a system of coordinated health care interventions and communications for populations with conditions in which patient self-care efforts are significant. Disease management: supports the physician or practitioner/patient relationship and plan of care; emphasizes prevention of exacerbations and complications utilizing evidence-based practice guidelines and patient empowerment strategies; and evaluates clinical, humanistic, and economic outcomes on an on-going basis with the goal of improving overall health.²²

The statutory requirements for MHS aligns with the tenets ascribed by DMAA but are expanded to address the special needs of the elderly. MHSOs are required to assess participants for all co-morbid conditions, utilize biometric monitoring when appropriate, provide medication management guidance, and inform beneficiaries about hospice, palliative, and end-of-life-care options. Prior to program launch, MHSOs were required to demonstrate senior-centric considerations, including provisions for diminished sight, hearing and cognitive ability, and plans for engaging family members or care givers whether beneficiaries were home-based or in long-term care facilities.

Beyond the statutory requirements, MHSOs have been allowed to create innovative programs. Differences include the degree of provider collaboration, the use of pay-for-performance tactics to increase provider engagement, and diverse interdisciplinary clinical teams providing a variety of interventions. Both CMS and industry stakeholders are vitally interested in learn-

ing the impact that the different care models will have on the quality, satisfaction, and financial outcomes of the programs.

A misperception regarding MHS and commercial DM in general is that programs are disease-specific, with participants who have multiple chronic conditions engaging in numerous disparate programs and receiving case management services from yet other entities. While early DM programs were limited to condition-specific

A unique feature of the MHS program is the strong alliances that have been formed between the MHSOs and community resources.

intervention with case management support delivered from a separate and distinct service line or vendor, market forces now require medical management services to be more integrated and seamless. The MHS pilot, as with most of today's commercial DM programs, apply individualized care plans that holistically address all the health education, behavioral, and self-care informational needs of the participants independent of primary diagnosis, and include care coordination and collaboration activities typically associated with case management.

Engaging the Community

A unique feature of the MHS program is the strong alliances that have been formed between the MHSOs and community resources. For many of the pilot sites,

MHSOs have deployed field-based clinicians, including geriatricians, registered nurses, and case managers, to engage and collaborate with the local hospitals, provider groups, and organizations (such as Meals on Wheels) that render services to beneficiaries in the target regions. Gaining program support at the community level has been deemed so valuable that CMS augmented MHSO community announcement efforts with local appearances and formal press conferences with CMS officials including Dr. Mark McClellan, CMS Administrator.

Another difference between the MHS program and commercial DM programs is the support provided to beneficiaries residing in long-term care facilities. MHSOs apply intervention plans to ensure beneficiaries receive care in accordance with evidence-based medicine by having field-based care managers work with the staff, family members, and, where feasible, directly with the beneficiary residing in a long-term care facility.

Measuring Program Success

The value proposition of DM and the methodology for measuring outcomes remains a highly debated subject in the realm of chronic care programs. Industry stakeholders including consultants, insurance companies, actuarial firms, and the DM organizations themselves have not reached consensus on a standard measurement methodology. This has propagated the perception in the minds of some that DM may not be an effective cost containment strategy and that proposed savings are a result of regression to the mean, not of the programs themselves.

The CBO added fodder to the outcomes debate with the release of its 2004 report

which included peer-reviewed literature that showed "... insufficient evidence to conclude that disease management programs can generally reduce overall health spending." DM advocates were quick to point out a valid shortcoming of the report—the findings were based on literature representative of first generation DM models that have since matured into population-based, robust, total health management programs that utilize medical, pharmacy, and laboratory claims for outcomes analysis.²³ Nonetheless, the CBO report continues to be referenced by DM skeptics.

MHS organizations are at risk for delivering 5 percent savings net program costs at the end of the three-year pilot. To ensure that savings are not achieved at the expense of quality, MHSOs must achieve targeted quality outcome indices in addition to the net 5 percent costs savings. CMS will provide reports to MHSOs as to their progress in the areas of improved quality, financial, and utilization metrics; in accordance with the legislation mandate, the agency has designed a process for independent evaluation to assure scientific rigor and objectivity in the measurement and reporting of outcomes.

As a large-scale pilot, industry watchers and stakeholders alike are immensely interested in the financial outcomes generated by the eight regional programs. Most significant to entities in the business of chronic care management is the potential for expansion of the MHS program to other Medicare FFS beneficiaries. In accordance with the legislation, the Secretary of Health and Human Services may expand the program, or program components, to additional geographic areas or nationally, if the findings of the independent evaluation deem that target quality, satisfaction, and

financial outcomes have been met. (See interview on page 19 with Barbara S. Hoffman, Director of the Division of Chronic Care Improvement Programs at the Centers for Medicare and Medicaid Services.)

Conclusion

Effective strategies for managing chronic illness in an aging population are of paramount importance to the health care industry and the U.S. at large. From the perspec-

As a large-scale pilot, industry watchers and stakeholders alike are immensely interested in the financial outcomes generated by the eight regional programs.

tive of CMS, the intent of the MHS program is to identify what types of programs work best for beneficiaries represented by the subset of participants—Medicare beneficiaries with chronic conditions associated with high medical utilization and expenditure.

The implications for MHS, however, are far-reaching; ideally, the pilot will give providers and DM entities the necessary information to create more effective, integrated models of care for people with chronic conditions. The results of the pilots will be provided to Congress in a series of reports; the first interim report is scheduled for

August 2007 and shall include preliminary cost and quality findings. ❖

Endnotes

1. Congressional Budget Office Report, *High Cost Medicare Beneficiaries*, 2005.
2. Institute of Medicine, *Crossing the Quality Chasm: A New Health System for the 21st Century*, Washington, D.C., National Academy Press, 2001.
3. C. Hoffman, D. Rice, and H.Y. Sung. "Persons With Chronic Conditions: Their Prevalence and Costs," *JAMA*, 276, 1473–79, 1996.
4. Institute of Medicine, *Crossing the Quality Chasm: A New Health System for the 21st Century*, Washington, D.C., National Academy Press, 2001.
5. T. Bodenheimer, E. Wagner, and K. Grumbach, "Improving Primary Care for Patients With Chronic Illness," *JAMA*, 288, no. 14, 2002.
6. Partnership for Solutions, (Update) *Chronic Conditions: Making the Case for Ongoing Care*, 2004.
7. *Ibid.*
8. *Ibid.*
9. G.F. Anderson and J.R. Knickman, "Changing the Chronic Care System to Meet People's Needs," *Health Affairs* 20, no. 6, 146–160, 2001.
10. J. Wolfe, B. Starfield, and G. Anderson, "Prevalence, Expenditures and Complications of Multiple Chronic Conditions in the Elderly," *Archives of Internal Medicine*, 162, no. 20, 2269–2276, 2002.
11. Institute of Medicine, *Crossing the Quality Chasm: A New Health System for the 21st Century*, Washington, D.C., National Academy Press, 2001.
12. Congressional Budget Office Report, *High Cost Medicare Beneficiaries*, 2005.
13. M. Schuster, E. McGlynn, and R. Brook, "How Good is the Quality of Health Care in the United States?," *The Milbank Quarterly*, 76, no. 4, 517–563, 1998.
14. T. Bodenheimer, E. Wagner, and K. Grumbach, "Improving Primary Care for Patients With Chronic Illness: The Chronic Care Model, Part 2," *JAMA*, 288, no. 14, 1909–1914 2002.
15. Congressional Budget Office Report, *High Cost Medicare Beneficiaries*, 2005.
16. *Diabetes Care*, 3, 917–32, 2003.
17. Institute of Medicine, *Crossing the Quality Chasm: A New Health System for the 21st Century*, Washington, D.C., National Academy Press, 2001.
18. M. Schuster, E. McGlynn, and R. Brook, "How Good is the Quality of Health Care in the United States?," *The Milbank Quarterly*, 76, no. 4, 517–563, 1998.
19. C. Clark et al., "Promoting Early Diagnosis and Treatment of Type 2 Diabetes," *JAMA*, 284, 363–365, 2000.
20. *Changing Health Care Systems to Provide Better Diabetes Care for Older Adults*, 2002–06; www.asaging.org/cdc/module7/phase3_5.cfm.
21. Complete text of the Medicare Modernization Act; www.cms.hhs.gov/EmplUnionPlanSponsorInfo/downloads/hr1.pdf. Referenced provision; Title VII, Subtitle C—Chronic Care Improvement, Section 721. Voluntary chronic care improvement under traditional fee-for-service.
22. www.dmaa.org/definition.html.
23. The Congressional Budget Office, *An Analysis of the Literature on Disease Management Programs*, October 2004.

Birdie D'Andrea is the practice lead for disease management at Mitretek Healthcare and a principal investigator in Mitretek's Center for Health Innovation. Her experience includes strategic and tactical planning for the payer and provider community and operations management. She helps employers, government, and other entities design and implement programs that positively impact health status, quality of care, and productivity.



Katharine D. Darst is a senior consultant at Mitretek Healthcare and a principal investigator in Mitretek's Center for Health Innovation. Her experience includes quality improvement, operational assessment, and performance management program development. She received her M.A. in Health Services Management from Webster University, Saint Louis, Missouri.

