

MAKING MEDICARE RESTRUCTURING WORK

Final Report of the Study Panel on Medicare
and Chronic Care in the 21st Century

**Medicare in the
21st Century:**

**Building a Better
Chronic Care
System**

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NATIONAL
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National Academy of Social Insurance Study Panel on Medicare and Chronic Care in the 21st Century

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Executive Summary

This report is about how Medicare could improve care for beneficiaries with chronic conditions. During the mid-1960s, acute care—not chronic care—was the major focus of medicine. When Medicare was instituted in 1965, it was modeled after the health insurance system of that time. Medicare was to function primarily as a claims payer; its benefit package and reimbursement systems were not designed for chronic conditions; preventive services were excluded; and reimbursement was paid only for in-person visits and procedures to individual providers. Since then, good chronic care and comprehensive coverage have become crucial to Medicare beneficiaries. Though some improvements have been made to Medicare, major changes in the provision and financing of chronic care for Medicare beneficiaries are needed. Medicare has the potential to refocus its Medicare program—as well as the nation’s health care system—and should take a leading role in improving chronic care.

This report is the final product of the Medicare and Chronic Care in the 21st Century study panel, a panel convened by the National Academy of Social Insurance as part of its *Making Medicare Restructuring Work* project. The panel was charged with determining the health care and related needs of Medicare beneficiaries with chronic conditions, how well Medicare meets their needs, features of the current Medicare program that support or impede good chronic care, and the experience of other chronic care models. The panel was also expected to set a new vision for Medicare to improve care and financing for beneficiaries with chronic conditions, and then propose recommendations to move toward that vision.

The report is divided into five sections:

- overview of Medicare and chronic conditions, including prevalence of chronic conditions, financial implications of chronic conditions, Medicare’s original intent, characteristics of “good” chronic care, and the panel’s guiding principles
- needs and preferences of beneficiaries with chronic conditions
- barriers to chronic care facing the Medicare program and its providers
- past initiatives to improve care to people with chronic conditions
- long-term vision and short- to mid-range recommendations

The study panel focused on original Medicare, Medicare’s traditional fee-for-service program. It chose this focus because 35 million of Medicare’s 40 million beneficiaries are covered under this system. The study panel also recommended changes to the Medicare+Choice (M+C) system, as changes to M+C may be easier to facilitate.

OVERVIEW OF CHRONIC CONDITIONS AMONG BENEFICIARIES

Though there are many ways to define the term “chronic condition,” the panel chose to define it as an illness, functional limitation, or cognitive impairment that lasts (or is expected to last) at least one year; limits what a person can do; and requires ongoing care. Chronic conditions are prevalent among Medicare beneficiaries, as most (87 percent) have one or more chronic condition and 65 percent have multiple chronic conditions. In addition, one-third of beneficiaries have one

or more chronic condition defined as serious. Though poor Medicare beneficiaries are the most likely to have a chronic condition, all beneficiaries are at-risk, either through heredity, environmental factors, diet, age, or chance.

The cost of managing chronic conditions is substantial. A disproportionate amount of Medicare dollars is spent on beneficiaries with chronic conditions. Beneficiaries with five or more chronic conditions account for 20 percent of the Medicare population but 66 percent of Medicare spending. Out-of-pocket spending increases with the number of chronic conditions: for beneficiaries with three or more chronic conditions and no supplemental coverage, 1996 mean annual out-of-pocket expenditures were \$1,492 (compared to \$455 for those with no chronic conditions). Beneficiaries' high out-of-pocket expenditures suggest that Medicare does not provide the financial protection that it was originally designed to ensure. In addition, though expenditures for chronic care are high, the Centers for Medicare & Medicaid Services (CMS) and its beneficiaries are not getting the best value possible for the dollars spent.

NEEDS AND PREFERENCES OF BENEFICIARIES WITH CHRONIC CONDITIONS ARE BEYOND WHAT MEDICARE CURRENTLY PROVIDES

The quality and scope of care for beneficiaries with chronic conditions are lacking. Though age and disability-specific care are a major priority for this population, most providers lack training in geriatrics and the assessment and management of functional status and cognition. Many beneficiaries with common chronic conditions do not receive care recommended by clinical guide-

lines. Systems of care do not facilitate coordination of care among beneficiaries' multiple providers, nor do they facilitate more accessible and efficient care, such as care provided by teams of providers, or by phone and email. Support for self-management and family care participation may also be negligible.

Medicare does not pay for a substantial share of beneficiaries' health care spending, which disproportionately affects those with chronic conditions. Beneficiaries must pay out-of-pocket for Part B premiums, deductibles, and coinsurance. Medicare also does not have a limit on beneficiary copayments for covered services. It does not cover prescription drugs, a major form of chronic care treatment, and provides few benefits to prevent chronic conditions or delay their progression. In addition, Medicare does not support many functional and quality of life needs. Sensory loss, for example, is not considered by Medicare to be a medical concern, and eyeglasses and hearing aid benefits are excluded from coverage by statute. Rehabilitative services are often not covered when the goal is to maintain or slow the deterioration of function. Also, durable medical equipment (DME) and home health care policies may limit beneficiaries' ability to function in society, as DME coverage requires that the equipment be used primarily in the home, while home health coverage requires that the beneficiary be "homebound."

THE MEDICARE PROGRAM FACES—AS WELL AS POSES FOR PROVIDERS—CONSIDERABLE BARRIERS TO CHRONIC CARE

Medicare does not adequately support providers in their treatment and management of chronic conditions. Its fee-for-service reimbursement system does not pay for many

of the services and tools important for the care of beneficiaries with chronic conditions, nor does it offer providers the flexibility to utilize new and efficient methods of operation. Though these limitations are characteristic of the general U.S. health care system, Medicare's barriers to improved chronic care may be more pronounced because Medicare beneficiaries are over twice as likely as the non-Medicare population to have a chronic illness, and are three times as likely to have a functional limitation. Also, under the 1965 statute, CMS has limited authority over its providers, as it is not permitted to "exercise any control over the practice of medicine or the manner in which medical services are provided." These and other statutes impede the provision of chronic care services.

Original Medicare's fee-for-service reimbursement policies do not support quality chronic and geriatric care. Reimbursement is not adjusted for the additional complexity and time it takes to care for chronic conditions. Payment to individual providers for discrete services (i.e., office visits and procedures) discourages a team approach to care and other means of care that may be more conducive to comprehensive and more efficient care. It also provides little incentive to keep beneficiaries well. Though a number of techniques have been developed to help providers manage care, most have not been incorporated into providers' care systems and are not reimbursable by Medicare. Capitated payments to health plans would appear to bypass such constraints. However, the experience of M+C found that payment by capitation did not assure increases in the quality of chronic care. It appears that regardless of organizational and financial arrangements, improving our present systems of care is difficult and will require comprehensive change.

Congress and CMS have implemented a number of quality improvement initiatives. Unlike for M+C, most of CMS' quality initiatives for original Medicare do not rely on regulatory requirements. Also, its initiatives do not focus on care at the physician level, the source of most chronic care, as it is constrained by the political and statistical difficulties of monitoring individual physicians. However, the National Committee for Quality Assurance (NCQA) has begun work to report on ways of measuring the quality of care provided by physician practices, beginning with large practices. NCQA and other large accreditation organizations have also set standards for accreditation, certification, and performance measurement of chronic disease management. As the quality of such information improves, CMS could incorporate such measures into original Medicare. This could lay the basis for paying more to providers who deliver high standards of quality of care.

One of the primary ways CMS tests new ideas is through research and demonstration projects. However, CMS' ability to innovate is limited by the Office of Management and Budget's (OMB) requirement that demonstration projects be budget neutral. Not only does OMB require that demonstration projects not increase Medicare expenditures over projected spending in the absence of the demonstration, but in the case of demonstrations enrolling dual eligibles, budget neutrality is calculated separately for each program so that savings in one cannot be used to offset increased spending in the other. The recent chronic care demonstrations are severely constrained by the requirement that they be budget neutral because CMS requires that the demonstrations provide drugs and services not covered under original Medicare. Thus, the evaluation of these demonstrations

will be based largely on the providers' ability to manage Medicare expenditures of participating beneficiaries—at a cost that may not be realistic—while de-emphasizing improvements to quality of care. How chronic care could best be managed under more realistic conditions—allowing modest cost increases that might be shared by beneficiaries, for example—will be left untested.

PAST INITIATIVES TO IMPROVE CARE TO PEOPLE WITH CHRONIC CONDITIONS PROVIDE VALUABLE EXPERIENCE

A number of initiatives have been implemented to improve care for people with chronic conditions. CMS' Program for All-Inclusive Care for the Elderly (PACE) and the Social HMOs (S/HMOs) have attempted to integrate the financing and delivery of medical care and community-based care systems for the frail elderly. Other efforts include Medicare case management demonstrations for high-cost beneficiaries, and its end-stage renal disease (ESRD) program, which redesigned the payment system for ESRD. Health plans have also implemented programs to improve chronic care. Kaiser Permanente's Northern California region's heart failure program, for example, has worked to improve the care system for patients with congestive heart failure. Another approach that health plans, provider groups, and CMS participate in is the Chronic Care Breakthrough Series Best Practice Collaborative, which utilizes the Chronic Care Model for its redesign of health care organizations' care systems.

These initiatives offer lessons that can be incorporated into mainstream Medicare. Most of these initiatives found that chronic care requires specialized training of and the

coordination of providers. They also suggest that financial incentives that align with program goals may be helpful. In addition, information systems are important to chronic care initiatives, as organizations must have the ability to track patients, diagnoses, and utilization. Experience also shows that sustained improvement requires comprehensive system change, and that it may not be possible to vastly improve systems of care on a budget-neutral basis.

RECOMMENDATIONS

The study panel's recommendations include its long-term vision for Medicare and six short- to mid-term recommendations. Its recommendations address changes across the range of policy sources, including Medicare statute; regulations; national coverage decisions; contractor manuals, memoranda, or other guidance; and policy interpretations by Medicare contractors, including local medical review policies.

Long-Term Vision

In the panel's long-term vision, Medicare would provide beneficiaries with access to needed services and financial protection from costs that pose barriers to chronic care. This would involve adding coverage for services not presently included in Medicare's benefit package, including function and quality of life-related services. Changes to the benefit package would be designed to meet the needs of beneficiaries. Medicare would also set reasonable limits for beneficiaries' health related out-of-pocket expenditures.

The panel's vision entails a dramatic shift to include a chronic care focus in Medicare. Providers' practices would be based on evidence-based guidelines. Concern for function

and quality of life would be integrated into the care system. There would be a seamless continuum across acute, chronic, long-term, and end-of-life care. All providers would use computerized information systems, which would support the sharing of electronic medical records among providers, medication order checks, and patient-specific protocols.

As the largest health care purchaser in the country, Medicare would actively work to improve the quality of chronic care. It would meet and surpass the quality standards set by the broader health care system. Quality of care would be measured and reported to the public. Medicare would make additional payments to providers who offer high quality care. Measures of quality of care would be sensitive to the unique conditions, issues, and diversity of concerns of beneficiaries with chronic conditions.

Reimbursement methods would cease to be an obstacle to chronic care, and would instead support quality chronic care delivery. Such methods would align incentives, adjust for risk factors, and offer providers the flexibility they need to provide good chronic care. Variations on prepayment and salaries to better support chronic care would be considered. Most providers would be affiliated with a provider network organization, a health plan, or integrated delivery system that offers them organizational support for chronic care.

Short- to mid-range recommendations

The following are the panel's short- to mid-term recommendations, some of which could be implemented immediately; others which may take five to ten years, though work on all should begin immediately.

Recommendation 1: Provide beneficiaries with financial protection from chronic conditions.

- Limit cost sharing requirements by adding an annual cap on out-of-pocket expenditures for covered services.
- Cover services necessary for beneficiaries' chronic care needs (as addressed in Recommendation 2).

Recommendation 2: Support the continuum of care beyond those services presently covered by Medicare.

- Address gaps in Medicare's benefit structure. Two significant gaps are prescription drugs and preventive health services.
- Strive to include services related to function and health-related quality of life.
 - Relax the requirement that to be covered for home care, beneficiaries must be homebound.
 - Cover durable medical equipment with the specific intent of maintaining or restoring function.
 - Provide for assistive devices that compensate for sensory or neurological deficits.
 - Support rehabilitation as a tool to improve, maintain, or slow the decline of function.
- Involve families of beneficiaries. Provide families information and education about Medicare policies and choices of health plans and providers. Add an explicit patient-family education benefit. Adequately compensate providers for family consultation through modification of Evaluation & Management codes.

**Recommendation 3:
Promote new models of care.**

- Foster delivery system change.
 - Encourage improved practice organization and care delivery.
 - Support geriatric assessment and management.
 - Integrate services for those dually eligible for Medicare and Medicaid.
- Increase providers' knowledge of chronic and geriatric care.
 - Use Graduate Medical Education funding to support chronic care training.
 - Support geriatric training for all physicians and train more academic geriatricians.
- Payment should support new models of care.
 - Risk-adjust Evaluation and Management (E&M) codes.
 - Improve models for risk-adjusting prepaid arrangements.
 - Test alternative payment models within original Medicare.

**Recommendation 4:
Strengthen CMS' role as a purchaser of care.**

- Measure and report on the quality of chronic care.
- Designate Medicare Partnerships for Quality Services demonstration (formerly called the Centers of Excellence) for select chronic conditions.

**Recommendation 5:
Support enhanced information systems.**

- Foster implementation of electronic information systems.

- Promote the collection and standardization of health and functional assessment data.

**Recommendation 6:
Implement and support funding for research and demonstration projects.**

- Sponsor a wide variety of chronic care research and demonstration projects and readily incorporate successful elements into the Medicare program.
- Focus projects on multiple chronic conditions.
- Redefine budget neutrality for the purpose of approving proposed demonstrations.
- Increase CMS' budget for research and demonstrations to improve chronic care.

Some of these recommendations will take longer to enact than others; some will cost the Medicare program more than others. The panel hopes that policymakers will move quickly to put as many of these recommendations in place as possible.

Along with a prescription drug benefit, the recommendations the panel believes would have the most substantial impact if enacted are:

- limiting cost-sharing requirements by adding an annual limit for out-of-pocket expenditures;
- supporting new models of care by risk-adjusting Evaluation and Management (E&M) codes;
- implementing information systems that track beneficiaries across multiple providers and care settings.

The three low-cost recommendations that the panel believes would significantly improve the quality of chronic care are:

- using Graduate Medical Education (GME) funding to support chronic care training;
- testing alternative payment models;

- measuring and reporting on the quality of chronic care.

Medicare has for too long short-changed beneficiaries with chronic conditions. It has the opportunity to improve the value of care provided to its beneficiaries and must take the lead in improving chronic care.

Chapter 1: Introduction

This report of the Medicare and Chronic Care in the 21st Century study panel analyzes how well Medicare meets the needs of beneficiaries with chronic conditions and provides recommendations for Medicare's improvement of chronic care. This study panel is part of the *Making Medicare Restructuring Work* project of the National Academy of Social Insurance (NASI). It is the seventh of the NASI study panels on Medicare, four of which completed their work before this panel began.

Although the previous NASI study panels targeted other Medicare issues, all grappled with Medicare's inadequacies in caring for beneficiaries with chronic conditions. In 2000, the NASI Medicare Steering Committee summarized the findings of the first four study panels (Bernstein and Reischauer, 2000). It concluded:

- Medicare reform needs to be addressed in the wider context of how health care is organized, paid for, and used in America.
- The current Medicare benefit package is inadequate.
- Market-based competition raises difficult issues with respect to payment equity and the distribution of risk in Medicare markets.
- Regardless of other program reforms, structural changes would be necessary to give the agency that manages Medi-

care the capacity to better manage the health care financed through its fee-for-service program.¹

The Steering Committee recommended that a study panel be formed to address issues of access to appropriate care for Medicare beneficiaries with complex, chronic, and long-term health care conditions and disabilities. It also recommended additional study panels to examine issues of the operation of Medicare in a market-based system and the governance and management of the program.

Since the Steering Committee's report was issued, the quality of the U.S. health care system and its lack of management for chronic conditions has received considerable attention. The Institute of Medicine's 2001 report, *Crossing the Quality Chasm: A New Health System for the 21st Century*, documents the low quality of the U.S. health care system and recommends focusing on chronic illnesses as the starting point for improvement. Similarly, the Robert Wood Johnson Foundation and others have done a substantial amount of work examining the prevalence and management of chronic conditions—all of which have pointed to the magnitude of change needed to address chronic care. Congress and the public are becoming increasingly aware of the U.S. health care system's deficiencies in handling chronic conditions and are putting pressure on the Medicare program to improve care to beneficiaries.

1 The Centers for Medicare & Medicaid Services (CMS, formerly the Health Care Financing Administration (HCFA)).

A. PANEL'S CHARGE

The study panel on Medicare and Chronic Care in the 21st Century was asked to examine problems and possible solutions for delivering appropriate care to the growing number of Medicare beneficiaries with chronic care needs. In particular, the panel sought to:

- determine the health care and related needs of Medicare beneficiaries with chronic conditions, how well Medicare meets their needs, and features of the current Medicare program that support or impede good chronic care;
- assess the experience of other chronic care models, including Medicare demonstrations, community-based care, and group, staff, and network model health plans;
- set a new vision for Medicare to improve care for beneficiaries with chronic conditions and make recommendations to move toward that vision.

The study panel determined that the full spectrum of changes necessary for optimal chronic care will take time and resources to be implemented. Thus, it produced two sets of recommendations: one that is visionary and long-term; and a second that can be implemented within the next ten years and lead toward achieving that vision. It proposes changes to the level of beneficiaries' financial risk, the health care delivery system, the role of prevention, coverage of non-medical services, Medicare's relationships with providers, and research and development to improve chronic care. Though the study panel recognizes the

role that long-term care plays in chronic care, it concentrated on health care needs and not on the residential and supportive services that are central elements of long-term care.

The study panel focused on original Medicare, Medicare's traditional fee-for-service program. It chose this as its primary focus because 35 million of Medicare's 40 million beneficiaries are covered under this system. The study panel's recommendations also pertain to the Medicare+Choice (M+C) system. Change may be easier to facilitate in M+C for three reasons: CMS has more authority to place requirements on health plans than on original Medicare providers,² health plans generally have greater institutional capability than fee-for-service-based solo or group practice physicians to coordinate care, and capitation offers flexibility to better organize and deliver care.

B. DEFINITION OF CHRONIC CONDITION

The study panel chose to use the term "chronic condition" to distinguish it from the more commonly used term "chronic illness" because chronic illness typically excludes sub-clinical conditions that do not qualify as an illness (e.g., lipid abnormalities) and functional and cognitive impairments that are not associated with illness (e.g., spinal cord injury). Though there are numerous ways to define "chronic condition," the panel chose the definition used by Partnership for Solutions, which defines it as a condition which lasts (or is expected to last) a year or longer, limits what a person can do, and requires ongoing care.

2 The term "provider" is used throughout this report to mean any professional or institution who is reimbursed by Medicare, including physicians, rehabilitation therapists, hospitals, skilled nursing facilities, and home health agencies.

C. PREVALENCE OF CHRONIC CONDITIONS

Alternative definitions of the term “chronic condition” produce a range of estimates of the percentage of beneficiaries with chronic conditions. A relatively broad definition of “chronic condition” is expected to produce a higher prevalence estimate, while a more stringent definition is expected to produce a lower estimate. This section presents estimates of the percentage of beneficiaries with chronic conditions.³ It uses a broad definition to reflect those beneficiaries with any chronic condition (serious and not-as-serious), and a more stringent definition for those with serious chronic conditions.

Any Chronic Condition

Most beneficiaries (87 percent) are eligible for Medicare by being age 65 or older; 13 percent of beneficiaries are under age 65 and are disabled according to Social Security disability insurance guidelines. In addition, beneficiaries with end-stage renal disease (ESRD) account for 0.8 percent of Medicare beneficiaries.⁴ Approximately 17 percent of all

Medicare beneficiaries are dually eligible for both Medicare and Medicaid. Dual eligibles include those living in nursing homes, as well as those living in the community with limited resources.

According to the Medicare Current Beneficiary Survey (MCBS), in 1999, 88 percent of Medicare beneficiaries over age 65 and 82 percent of disabled beneficiaries under age 65 had at least one of the following ten chronic conditions: stroke, diabetes, emphysema, heart disease, hypertension, arthritis, osteoporosis, broken hip, Parkinson’s disease, and urinary incontinence.⁵ The percentage with more than one of these chronic conditions is also substantial: 66 percent of aged beneficiaries and 62 percent of disabled beneficiaries have more than one chronic condition.⁶ Almost all (97 percent) of those with ESRD have at least one other chronic condition on this list (see Chart 1 see page 4). Furthermore, another dataset found that 20 percent of the aged and 14 percent of the disabled beneficiaries have five or more chronic conditions (Partnership for Solutions, 2001).

3 Estimates throughout this section are derived from different data because no single source was available that provided complete information. Therefore, data from these sources are not directly comparable. Data from the Medicare Current Beneficiary Survey (MCBS) are self-reported and include questions on beneficiaries’ clinical conditions, as well as functional abilities. Another data source used by Partnership for Solutions, the Standard Analytic File (SAF), is a dataset of a five percent sample of Medicare claims data. Estimates may also differ because of methodological differences. Prevalence estimates from the Medicare Chart Book are based on a list of twelve common conditions, while those from Partnership for Solutions are based on ICD-9 codes and include many more conditions in its definition.

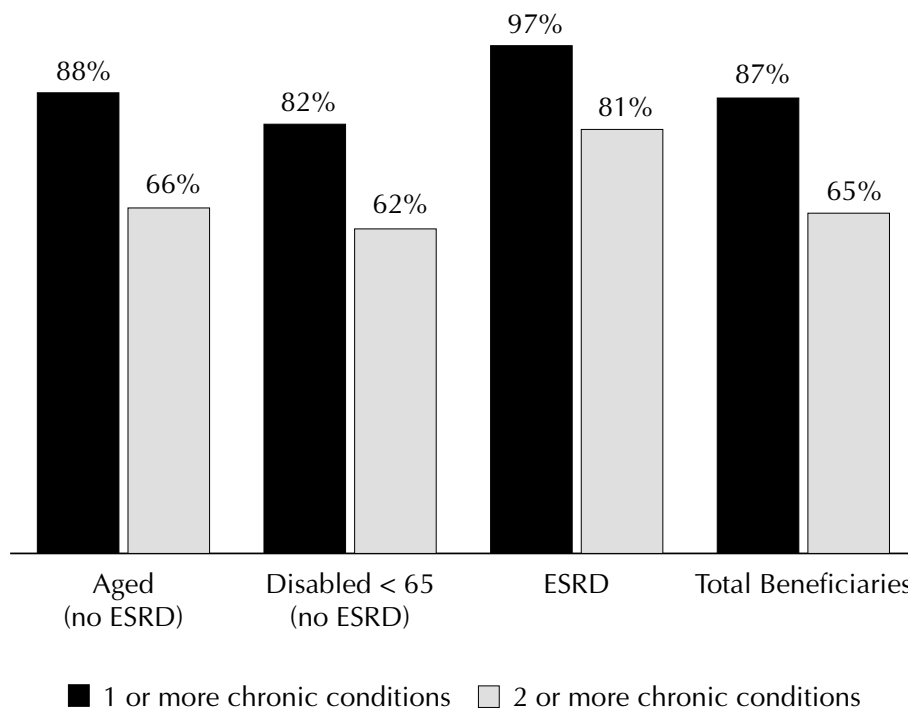
4 In 1998, well over half of new ESRD patients were over age 65 at the time of renal failure.

5 The term “disabled” is used throughout this report to include persons with disabilities who are under age 65 and who are covered by Medicare by meeting SSA’s definition of disability or who have ESRD. They must also have paid into the Social Security system for a minimum number of work quarters.

6 The term “aged” is used throughout this report to include persons who qualify for Medicare by being age 65 or older.

Chart 1

Percentage of Beneficiaries with Specified Chronic Conditions,
by beneficiary category, 1999



Source: 1999 Medicare Current Beneficiary Survey (Kaiser Family Foundation, 2001).

Notes: Aged, disabled <65, and ESRD categories exclude those living in a facility.

The count for chronic conditions includes stroke, diabetes, emphysema, heart disease, hypertension, arthritis, osteoporosis, broken hip, Parkinson's disease, and urinary incontinence.

ESRD includes aged and disabled with ESRD.

Total beneficiaries include those in facilities (1,900,670 beneficiaries).

As Table 1 shows (see page 5), these ten common chronic conditions are similar for both aged and disabled Medicare beneficiaries. Arthritis, hypertension, and pulmonary disease are the most common chronic conditions among beneficiaries. The risk of having one chronic condition may increase the risk of having another. For example, beneficiaries with diabetes are at increased risk of having hypertension. Those with ESRD are also likely to have hypertension, pulmonary disease, and diabetes.

Analysis of the Standard Statistical File (SAF) shows that almost all beneficiaries who live long enough will eventually have at least one chronic condition. While 74 percent of the 65–69-year-olds have at least one chronic condition, 86 percent of those 85 years and older have at least one chronic condition. Similarly, 14 percent of the 65–69-year-olds have five or more chronic conditions, while 28 percent of 85-year-olds and older have five or more (Partnership for Solutions, 2001).

Table 1**Percentage of Beneficiaries with Specified Chronic Conditions,
by beneficiary category and chronic condition, 1999**

	Aged (no ESRD)	Disabled <65 (no ESRD)	ESRD	Total beneficiaries
Arthritis	57%	52%	38%	57%
Hypertension	55%	46%	93%	55%
Pulmonary disease	38%	32%	56%	37%
Diabetes	17%	20%	51%	17%
Cancer (other than skin)	17%	12%	13%	17%
Skin cancer	18%	6%	12%	16%
Osteoporosis/ broken hip	16%	13%	17%	16%
Emphysema	14%	23%	15%	15%
Stroke	10%	13%	15%	10%
Alzheimer's disease	2%	1%	1%	2%
Parkinson's disease	1%	1%	1%	1%

Source: 1999 Medicare Current Beneficiary Survey (Kasier Family Foundation, 2001).

Notes: Aged, disabled <65, and ESRD categories exclude those living in a facility.

ESRD includes aged and disabled with ESRD.

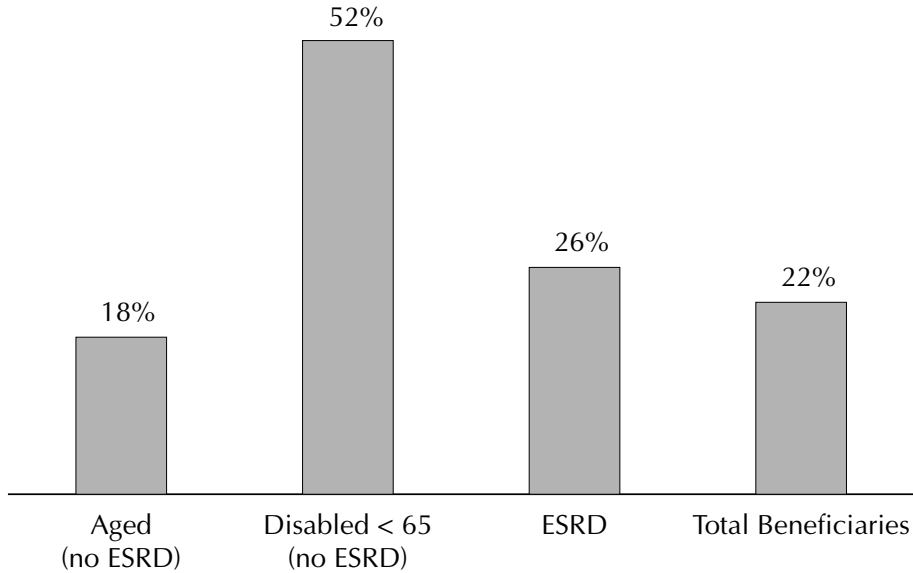
Total beneficiaries includes those in facilities (1,900,670 beneficiaries).

In addition to physical impairments, cognitive and mental impairments are prevalent among Medicare beneficiaries. As Chart 2 shows (see page 6), 18 percent of aged beneficiaries and 52 percent of disabled beneficiaries have a cognitive or mental impairment. Because these numbers are self-reported, the actual percentage of beneficiaries with cognitive or mental impairment may be even higher. An analysis of the SAF found that in 1999, 8.4 percent of aged beneficiaries have Alzheimer's disease or other dementia (Partnership for Solutions, personal correspondence). This percentage may also be an underestimate because providers may not use dementia codes when filing Medicare claims.

Many beneficiaries have functional impairments. Almost half of disabled beneficiaries have one or more functional limitations, and among aged beneficiaries, over one-quarter have one or more functional limitations (see Chart 3 on page 6). Assessment of function is typically based on the ability to perform activities of daily living (ADLs) and the ability to perform instrumental activities of daily living (IADLs). ADLs include basic tasks necessary for independent living, such as bathing, dressing, using the toilet, feeding oneself, transferring in and out of bed, and maintaining one's continence. IADLs address slightly more complex tasks that involve more cognitive ability, such as using the tele-

Chart 2

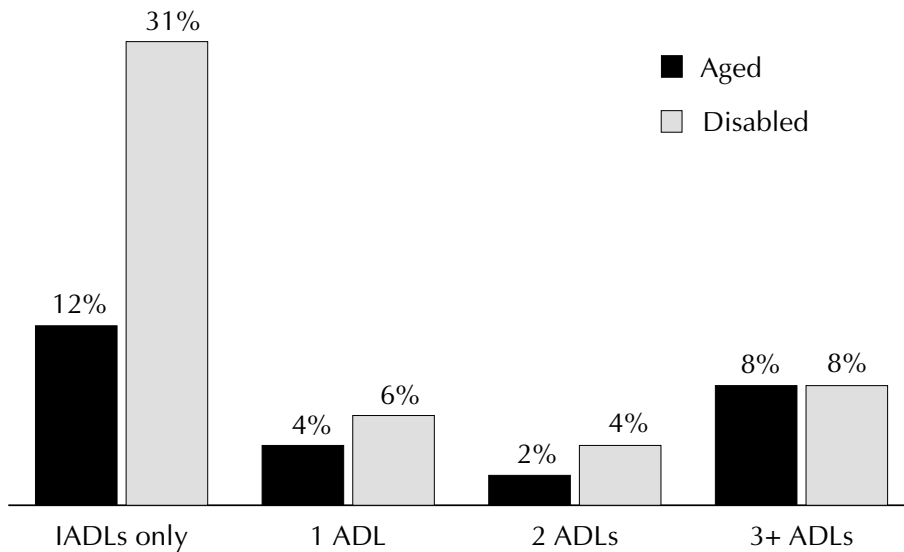
**Beneficiaries with Any Type of Cognitive or Mental Impairment,
by beneficiary category, 1998**



Source: Urban Institute, unpublished data, 2002.

Chart 3

**Beneficiaries with One or More Limitations in Activities of Daily Living (ADL),
by beneficiary category, 1998**



Source: Urban Institute, unpublished data, 2002.

phone, housekeeping, cooking meals, shopping, taking medications, and paying bills.

The risk of having a functional limitation rises as the number of chronic conditions increase. In 1996, 15 percent of beneficiaries with one chronic condition reported having a functional limitation, as did 33 percent of those with four chronic conditions, and 43 percent of those with seven or more chronic conditions (Partnership for Solutions, 2001).

Serious chronic conditions

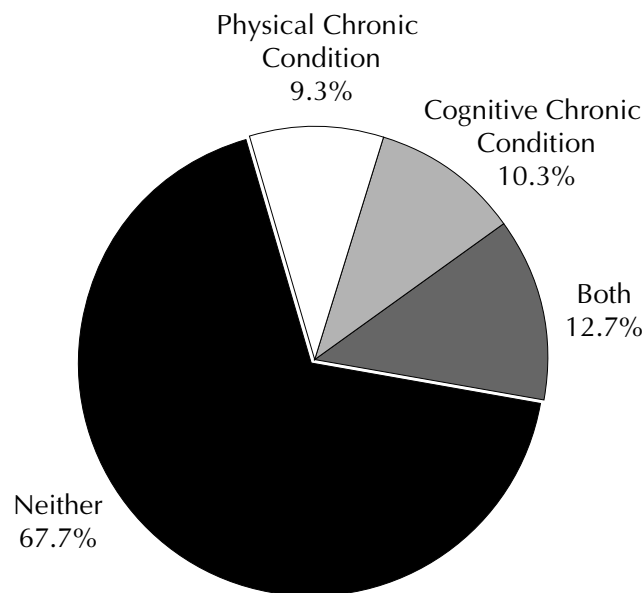
The previous section shows that 87 percent of Medicare beneficiaries—most beneficiaries—have one or more chronic condition. For some of these beneficiaries, their chronic

condition does not restrict their lives; for others, their condition severely affects their ability to function, their health status, and their health care utilization and spending. Though all beneficiaries with chronic conditions should benefit from better management of their condition, the needs of those with serious chronic conditions are more urgent than those with relatively less serious conditions.

As with the definition of “chronic condition,” there is no standard definition of “serious chronic condition.” In their 2001 publication, Moon and Storeygard identified beneficiaries with severe chronic conditions as those meeting their definition of having

Chart 4

Beneficiaries with Serious Chronic Conditions as a percentage of beneficiary population, 1997



Source: *One-Third at Risk: The Special Circumstances of Medicare Beneficiaries with Health Problems* (Moon and Storeygard, 2001).

physical or cognitive problems, or both.⁷ Using a more restrictive definition than this report's definition of any chronic condition, they estimate that in 1997, 33 percent of Medicare beneficiaries suffered from a serious physical problem, cognitive problem, or both.

D. CHARACTERISTICS OF BENEFICIARIES WITH CHRONIC CONDITIONS

Medicare beneficiaries with chronic conditions are a diverse population:

- They comprise all income brackets, although poor beneficiaries are more likely to have physical and cognitive impairments. Almost 12 percent of those with annual family incomes of less than \$15,000 report both cognitive and physical impairments, while 5 percent of those with incomes over \$50,000 report these conditions (Moon and Storeygard, 2001).
- The effects of their conditions may be medical, cognitive, or functional. A person with well controlled diabetes, for example, may need medication but not have cognitive or functional deficits. A person with early Alzheimer's may suffer from dementia but be otherwise medically healthy and physically functional.
- The health effects of their conditions range from minor to severe. Of beneficiaries over age 65: 25 percent those with lipid disorders, 33 percent of those with hypertension, 45 percent of those

with heart disease, and 50 percent of those with diabetes claim to be in fair or poor health (Anderson, 2001). The health status of those within a disease category may also vary across the spectrum. For example, the physical and functional effects of heart disease range from minor to debilitating.

The risk of having a chronic condition applies to all beneficiaries. Few individuals can predict from an early age what their health status will be as they grow older. It could include cancer, stroke, diabetes, Alzheimer's disease, or spinal cord injury. The way these risks play out for individuals, families, and communities may be shaped by the epidemiology of disease and perhaps by genetics, and is linked to socio-economic factors, risk behaviors, and sometimes luck (Moss, 1998). Thus, all beneficiaries depend on access to chronic care services and quality systems of care.

E. FINANCIAL IMPLICATIONS OF CHRONIC CONDITIONS

The need for managing chronic conditions has increased over the past two decades, due in part to an increase in life expectancy. Life expectancy at birth increased from 70.2 years in 1965 to 76.5 years in 1997. In addition, the baby boom generation's entrance into Medicare will place increased pressure on Medicare and the health care system. The number of beneficiaries is projected to continue to grow from 40 million in 2001 to 77 million by 2030. The number of beneficiaries over age 85—those with the greatest chronic

7 A beneficiary is classified as having a physical condition if they report three or more diagnoses, including rheumatoid arthritis, diabetes, Parkinson's disease and emphysema; if they have lived in a nursing home for any part of the year; have difficulty performing three or more activities of daily living (ADLs); or report being in "poor" health. A beneficiary is classified as having cognitive difficulty if they report problems using the telephone or paying bills, or have ever been told they have Alzheimer's disease or certain other mental conditions.

care needs—is projected to grow from 4.3 million to 8.5 million over this same period (Kaiser Family Foundation, 2001). The under age 65 disabled population has grown even faster than the aged population: enrollment rose from 2.2 million in 1975 to 5.6 million in 2000. By 2017, Medicare is expected to cover 8.8 million disabled persons (MedPAC, 2002a).

Expectations for the treatment of chronic conditions have also grown. While little was known about treatment of chronic conditions in 1965, advances in prevention, treatment, and management of many chronic conditions have fostered an attitude to “do something” (Vladeck, 2002). Pharmaceuticals, surgical treatments, and technological procedures used to address acute conditions now serve to treat or palliate some chronic conditions. Major joint replacement, for example, can provide relief and renewed function to severely arthritic joints.

Emerging technologies and interventions, though they may improve the quality of care provided, are often costly. The high cost of care for Medicare beneficiaries with chronic conditions has become a major concern:

- A disproportionate amount of Medicare expenditures is spent on beneficiaries with chronic conditions. For example, beneficiaries with five or more chronic conditions comprise 20 percent of the Medicare population but 66 percent of program spending (Berenson and Horvath, 2002).
- More chronic conditions equates to higher Medicare expenditures per beneficiary. As beneficiaries’ number of chronic conditions increases, average

Medicare expenditures increase. Mean Medicare annual expenditures per beneficiary with two chronic conditions is \$7,64; those with seven or more conditions have mean Medicare annual expenditures of \$22,056 (Partnership for Solutions, 2001).

- Care for beneficiaries who simultaneously have a chronic illness, disability, and a functional limitation is expensive. Direct medical costs for those with one or more chronic illness averages \$3,482; for those with a chronic illness and a disability, costs rise to \$6,193; for those with a chronic illness, disability and a functional limitation, costs rise further to \$11,477 (Anderson, 2001).

As the number of beneficiaries with chronic conditions increases, and as expenditures for treatment of chronic conditions rise, there is concern that Medicare expenditures will deplete the Hospital Insurance (Part A) Trust Fund and increase Supplementary Medical Insurance (Part B) expenditures paid from federal general funds and beneficiaries’ premiums. Total Medicare spending increased from \$35 billion in 1980 to \$241 billion in 2001. Part A expenditures are projected to rise by 72 percent between 2001 and 2011; Part B expenditures are expected to increase by 92 percent over this same period (Board of Trustees, HI and SMI Trust Funds, 2002).⁸

Despite the attention to Medicare expenditures, the panel believes that quality of care for beneficiaries with chronic conditions should be policymakers’ and the Medicare program’s primary concern. In addition, the value of Medicare’s expenditures should be

8 Intermediate assumptions.

considered: beneficiaries should receive the highest quality of care for the dollars spent. The panel also believes that long-term program costs cannot be controlled without addressing the quality of chronic care. Management of chronic conditions—or lack of management—will greatly influence Medicare spending.

F. ORIGINAL STATUTE AND INTENT

Medicare was created to ensure that the elderly would have health benefits comparable to those of the working age population, and at a reasonable cost to them and to society. At the time of its passage in 1965, the costs of health care were unaffordable to many elderly people. Persons aged 65 or

“No longer will older Americans be denied the healing miracle of modern medicine. No longer will illness crush and destroy the savings they have so carefully put away over a lifetime so that they might enjoy dignity in their later years. No longer will young families see their own incomes and their own hopes eaten away simply because they are carrying out their deep moral obligations.”

President Lyndon B. Johnson at the signing of the Medicare legislation in July 1965

older faced health care costs that averaged three times more than for younger persons, while at the same time they had only half as much income. Hospital costs were rising dramatically. Availability of health insurance for the elderly was a major problem, as only half of the elderly had health insurance and these policies typically covered only one-quarter of their hospital expenses (Blumenthal, et al., 1988).

Medicare was designed as a social insurance program. Under Part A, workers and their employers pay into the Medicare program in return for health insurance when workers and their spouses become elderly. The drafters of the original Medicare legislation emphasized coverage of hospital costs (Part A) because such costs accounted for the bulk of health care expenditures; outpatient and other health care–related costs at this time were a smaller share of costs than they are today. Part B (principally outpatient services) does not technically follow the social insurance model. It is funded through federal general funds and beneficiary premiums. Both Parts A and B provide equal coverage to all beneficiaries, regardless of income or assets. In 1972 Medicare eligibility was expanded to include persons under age 65 with long-term disabilities and those with ESRD who had paid into the Social Security system for a minimum number of years.

Medicare’s design was consistent with commercial indemnity insurance of the 1960s and incorporated the insurance principles of this period:

- The payer functioned as a passive claims payer.
- The benefit package and reimbursement systems focused on acute care and were not designed for chronic conditions.
- Preventive services were excluded.
- Reimbursement was limited to in-person visits with providers (the predominant way that physicians and patients interacted).

Since 1965, millions of elderly and disabled persons have benefited from Medicare. Beneficiaries’ support for Medicare has been overwhelming, even among those with gen-

erally negative views of the federal government (Bernstein and Stevens, 1999). In 1998, Robert Ball, Social Security Commissioner from 1962 to 1973 declared:

“Medicare has done well what it was designed to do. Because of the program, hundreds of millions of older people and their children have been better off. Not only has the cost of medical bills been made bearable, but lives have been saved and the quality of life of the elderly has been greatly improved....But it is a lifesaver itself in need of saving. Once a leader in providing health care, the program has fallen behind.”

Referring to deficiencies in coverage, particularly when compared to health insurance for the employed population, the study panel agrees that Medicare has fallen behind and no longer provides adequate financial protection to its beneficiaries. Medicare’s acute care focus, with limitations in coverage and support for a fragmented system of care, keeps Medicare from achieving its full potential. Thus, policymakers must grapple with how to ensure that beneficiaries’ chronic care needs are well served, while at the same time control the expenditures of beneficiaries and overall Medicare spending.

G. CHARACTERISTICS OF “GOOD” CHRONIC CARE

What is “good” chronic care? For what type of care should Medicare strive? In a paper

prepared for the study panel, former HCFA Administrator, Bruce Vladeck, described seven characteristics of good chronic care (Vladeck, 2002):⁹

- It is **continuous**. The same health professional, or coherent group of professionals, manages the patient’s care over the protracted time periods made necessary by the characteristics of chronic conditions.
- It is **multidisciplinary**. The effects and complications of serious chronic conditions—both medical and non-medical—are sufficiently diverse that no single professional discipline can be expected to adequately address them all. In good chronic care, physicians, nurses, social workers, therapists, nutritionists, and others work together in a highly communicative and mutually supportive way.
- It is **accessible**. Patients should not have to devote an inordinate amount of time and energy to obtain the services they need.
- It is **coordinated and seamless**. The different professionals and organizations involved in the patient’s care work together in an efficient and harmonious manner, in a way that is largely invisible to the patient.
- It **encourages “activation” of patients to be involved in their own care**. The better educated patients are about their problems and issues of self-care, the better off they are likely to be.

9 Based on the authority of Edward H. Wagner, et al., “Organizing Care for Patients with Chronic Illness,” *The Milbank Quarterly* 74(4), (1996), and Christine K. Cassel, Richard W. Besdine, and Lydia C. Siegel, “Restructuring Medicare for the Next Century: What Will Beneficiaries Need?” *Health Affairs* 18(1): 118–131, January–February, 1999.

- **It supports patients’ families and other caregivers.** Chronic illness happens to families, not just individual patients. Most care of the chronically ill, including chronically ill Medicare beneficiaries, is provided by non-professional relatives and friends. Good systems of chronic care reinforce such “informal” caregiving, rather than frustrate it.

The study panel agrees with Vladeck’s conclusion that Medicare, as it is currently constituted, does not support these characteristics.

H. GUIDING PRINCIPLES

The study panel adopted the following three principles for selecting policy changes to promote better chronic care:

- **Focus on beneficiaries’ needs and preferences.** Medicare should recognize and aim to meet the needs and preferences of beneficiaries. The panel acknowledges, however, that given resource constraints, Medicare cannot be expected to fulfill all of beneficiaries’ needs and preferences.

- **Payment should support recommended models of care delivery.** While changes to reimbursement policies are often recommended as solutions to Medicare’s chronic care problems, the panel believes that it is important to first recommend appropriate care models, and then structure reimbursement policies around such models (rather than vice-versa).

- **Aim for efficient care.** Noting that CMS and its beneficiaries are not getting the best value possible for the dollars spent, the panel seeks policies that minimize waste, expense, and unnecessary effort.

The panel also strove to base its recommendations on evidence. Evidence, however, is frequently limited, particularly in many areas of chronic care. The panel believes it is not always feasible to wait for definitive evidence when addressing critical and pressing policy issues. As the research base increases, policies should be modified according to new evidence.

Chapter 2: Needs and Preferences of Beneficiaries with Chronic Conditions are Beyond What Medicare Currently Provides

Beneficiaries have needs and preferences that call for improved medical care, as well as an expansion of Medicare's scope. In addition to controlling medical illness, they would like their health care to promote function, quality of life, self-management, and family involvement. For most beneficiaries with chronic conditions, attention to these factors is closely related to medical outcomes.

A. MEDICAL CARE

Age and disability-specific care is a priority for Medicare beneficiaries. Many aged beneficiaries have difficulty finding a physician knowledgeable about their aged-related problems. Though both geriatricians and primary care physicians could provide such care, many primary care physicians have little knowledge of geriatric principles and do not address functional and cognitive issues. Many persons with disabilities have difficulty finding providers who are sensitive to their needs, and medical facilities and equipment are not always accessible. Beneficiaries may also struggle to find participating specialists, particularly for mental health services.

Many beneficiaries do not receive appropriate care for their chronic conditions. One study found that, in 1999, 12 percent of beneficiaries with five chronic conditions were hospitalized with a condition that might have been avoidable with appropriate ambulatory care, and the percentage rose to almost 30 percent for those with nine chronic conditions. (Wolff, et al., 2002). Another found that 30

percent of beneficiaries, many of whom had chronic conditions, were not getting the follow-up care they needed (Foote and Hogan, 2001). Low quality of care for chronic conditions, however, is not unique to Medicare: recent surveys show that fewer than half of all U.S. patients with hypertension, depression, diabetes, or asthma are receiving appropriate treatment (Wagner, et al., 2001). One study found that 17 percent of U.S. adults with chronic conditions report receiving conflicting information from providers (Partnership for Solutions, 2001).

Beneficiaries' adherence to providers' orders can be difficult because many have a hard time understanding and remembering their providers' orders. Written instructions and reminders for appointments and medication refills are rare. Many also have a hard time arranging transportation to providers' offices. Though many of their questions could be handled over the phone or by email, providers' staff usually insist they make an appointment for an office visit (in part because providers are not reimbursed for phone or email consultations). Those who have difficulty coordinating their care and following orders may benefit from having help managing their care (as in the case study on page 14).

Those with chronic conditions find that their providers frequently do not work together to coordinate their care. The need to coordinate care becomes more important for beneficiaries with multiple conditions because the

Case Study

A 78-year-old woman with multiple chronic illnesses had been able to successfully manage her care with the help of her primary care physician. Over the last month, her health and her functional and cognitive abilities have markedly declined. Her judgment and memory are now seriously impaired and her ability to care for herself has been compromised. In light of these new symptoms, she was referred for an outpatient assessment; a home health evaluation; and to a dietician, social worker, and two medical specialists. While she had previously been able to navigate the health care system effectively, the additional burden of coordinating numerous contacts with multiple health care providers was impossible for her to manage. Also, though she tried to follow the recommendations of these numerous health care providers, the multiple—and sometimes contradictory—recommendations were too complex. She was hospitalized soon after.

Family Care Case Study

more chronic conditions a beneficiary has, the more physicians they see on average (see Chart 5 on page 15): those with one chronic condition visited 4.0 different physicians annually, those with three chronic conditions visited 6.5 different physicians, those with five chronic conditions visited 13.8 different physicians.¹⁰ Many of these beneficiaries do not have a primary care provider and instead receive care from a variety of specialists. Even those with a primary care provider find that their provider and specialists do not adequately communicate with each other. Consequently, providers treat beneficiaries and prescribe medications without knowing what other medications the beneficiary has been prescribed. Such treatment practices lead to medical errors.

Medicare covers few benefits to prevent chronic conditions or to delay their progression. The principles of disease prevention and health promotion for older persons were developed after Medicare was implemented and have steadily gained acceptance. Despite

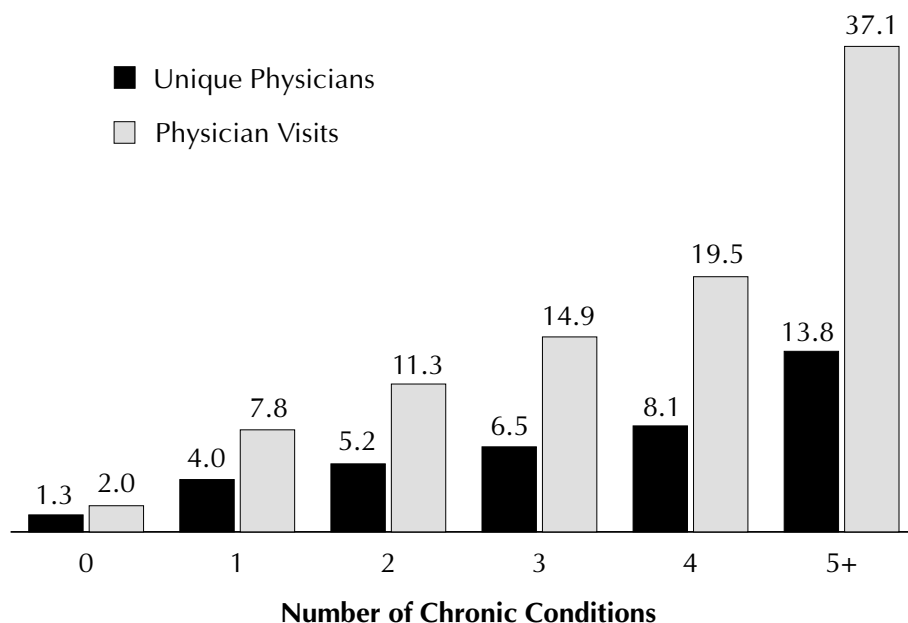
concepts of “healthy and successful aging,” the notion that health promotion and prevention for the elderly “is not worth it” lingers (Omenn, 1990). Nonetheless, a growing literature now indicates that chronic disease and functional disability can be measurably reduced or postponed through clinical preventive services and lifestyle changes (DHHS, 2003).

While the original Medicare statute excluded preventive health services from the benefit package, over the years Congress has added specific services. Some of these services are to prevent the onset of chronic conditions (e.g., certain immunizations); others are screening tools (e.g., pap smear, pelvic exam, mammography); others reduce the burden of disease for those who already have chronic conditions. For example, Congress has authorized a number of preventive health benefits exclusively for a small subset of beneficiaries with chronic conditions, including diabetes self-management training and supplies; glaucoma screening for those at high-

¹⁰ As distinct from the definition used by SSA, Partnership for Solutions defines disability as any one of the following characteristics: 1) the use of assistive technology, 2) difficulty walking, climbing stairs, grasping objects, reaching overhead, lifting, bending or stooping, or standing for long periods of time, 3) any limitation in work, 4) social/recreational limitations, 5) cognitive limitations, 6) vision problems, 7) deafness or difficulty hearing.

Chart 5

Average Annual Number of Physician Services,
by number of chronic conditions, 1999



Source: 1999 SAF. Partnership for Solutions, Oct. 19, 2001.

Note: Data for Aged 65+ beneficiaries

risk for glaucoma (diabetes or a family history of glaucoma); and medical nutrition therapy for those with diabetes, chronic renal disease, or kidney transplants. Nonetheless, other preventive health services, including cholesterol management, and hearing impairment screenings, remain uncovered.

B. PRESCRIPTION DRUGS

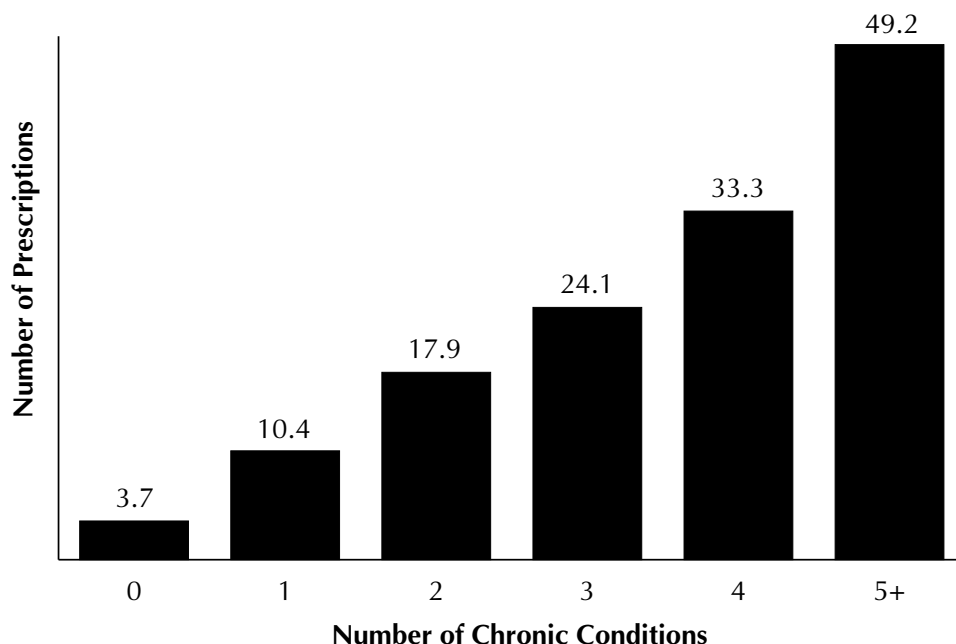
Beneficiaries need and want coverage for prescription drugs. An August 2002 poll found that 80 percent of those age 45 and above believe that a prescription drug benefit should be added to Medicare that year (Love, 2002). Prescription drug coverage is more urgent for beneficiaries with chronic conditions because ongoing drug treatment is crucial to the treatment of almost all chronic conditions. Also, the greater number

of chronic conditions a beneficiary has, the greater are his/her drug needs and expenditures. As Chart 6 (see page 16) shows, beneficiaries with two chronic conditions filled an average of 18 prescriptions annually; those with five or more chronic conditions averaged 49 prescriptions annually.

Lack of drug coverage under Medicare creates financial strain for many beneficiaries and their families, particularly for those with chronic conditions. A 2001 survey of aged beneficiaries in eight states found that among those with three or more chronic conditions and without drug coverage, approximately one-third reported not filling prescriptions because of cost and 36 percent skipped doses to make their medication last longer. The percentage of those with drug coverage and three or more chronic conditions who also

Chart 6

Medicare Beneficiaries' Average Annual Number of Prescriptions (including refills), by number of chronic conditions



Source: MEPS, 1996 (Berenson and Horvath, 2002).

reported not filling prescriptions and skipping dosages due to cost is also substantial (17 percent and 19 percent, respectively). The survey also found that among those with congestive heart failure, diabetes, or hypertension, over 25 percent did not fill at least one prescription in the past year because of cost (compared to 12–14 percent of those with coverage), more than one-tenth did not fill three or more prescriptions (compared to 4–6 percent of those with coverage), and approximately one-third skipped dosages to make prescriptions last longer (as did 14–17 percent of those with coverage) (Safran, et al., 2002).

Most beneficiaries (73 percent) have prescription drug coverage from sources other than Medicare (Kaiser Family Foundation, 2001). (See page 22 for discussion of supplemental insurance.) Nevertheless, many of those with prescription drug coverage find that it is not comprehensive.

- Only three of the ten standard Medigap benefit packages (Plans H, I, J) cover prescription drugs.¹¹ In part because premiums for these policies are expensive, in 2000, only nine percent of those with Medigap had one of these policies (Super, 2002). Plans H and I pay 50 percent of drug charges up to \$1,250 with a \$250 deductible; Plan J pays 50

11 To facilitate comparison shopping, OBRA 1990 required that all Medigap policies sold after 1992 conform to one of ten uniform benefit packages. The ten Medigap options (labeled A, B, C, ...) cover a core set of services and the benefits generally increase in comprehensiveness from A through J.

percent of charges up to \$3,000 per year, also with a \$250 deductible. For those with high prescription costs, these maximum limits will not cover their costs. Also, these plans are often not offered to disabled beneficiaries.

- M+C as a source of drug coverage is eroding. The percentage of M+C enrollees with prescription drug coverage fell from 84 percent in 1999 to 68 percent in 2003. Plans are simultaneously decreasing the amount of covered drug spending while increasing beneficiaries' copayments. Most plans (86 percent) limited drug benefits in 2000 and an increasing number of plans set annual benefit limits at \$500 or less (21 percent of plans in 1999 and 32 percent of plans in 2000). Only 18 percent of plans in 2000 offered drug coverage above a \$2,000 level (CRS, 2002).
- Nearly all (99%) beneficiaries with employer-sponsored health insurance have prescription drug coverage. However, firms are shifting prescription drug costs onto retirees. Among firms with 200 or more workers offering retiree health benefits, 32 percent of these firms increased prescription drug cost sharing requirements for retirees from 1999 to 2001 (Kaiser Family Foundation, et al., 2002).
- All beneficiaries with full Medicaid coverage receive prescription drug benefits. Medicaid plays a critical role in providing drug coverage to low-income beneficiaries but does not close the coverage gap entirely. Though Medicaid drug coverage is relatively generous, not all of those who are eligible are enrolled. Also, increased drug costs and strained state budgets have prompted states to

control Medicaid prescription drug utilization and spending. Many states are now placing limits on the number of concurrent prescriptions, the amount of drug supplied at one time, or the number of refills permitted. States may also charge minimal copayments of \$.50 to \$3.00, which may be burdensome for Medicaid beneficiaries.

- At least 34 states have established or authorized some type of program to provide pharmaceutical coverage or assistance, primarily to low-income elderly or persons with disabilities who do not qualify for Medicaid. Most programs subsidize a portion of the costs, but others use discounts or bulk purchasing approaches (NCSL, 2002). As with Medicaid coverage, not all of those who are eligible are enrolled, and most of these state programs do not provide complete coverage.
- CMS issued the final regulation for the Medicare-Endorsed Prescription Drug Initiative on September 4, 2002. Under this initiative, CMS will endorse card sponsors that secure rebates or discounts from drug manufactures on brand name and/or generic drugs. Beneficiaries can enroll in one Medicare-endorsed card program at a time. According to administration officials, this initiative is expected to yield savings that will be shared with enrollees, either directly or indirectly through pharmacy discounts or pharmacy services.

Though the above sources of prescription drug coverage may increase accessibility to beneficiaries, most do not protect fully and adequately against out-of-pocket costs. Also, the future of most of these coverage sources is not secure.

C. FUNCTION AND QUALITY OF LIFE

Many beneficiaries with chronic conditions have function and quality of life needs that are not covered by Medicare. For many beneficiaries, function and quality of life considerations are as important to them as their medical needs.

The case study below describes the experience of a relatively healthy woman who faced problems walking. The medical system did not address her functional issues before she broke her leg. Though it did ensure that her leg healed properly, it did not appropriately address her long-term functional concerns and issues.

Sensory aids

Medicare considers sensory loss a functional and quality of life issue—and not a medical concern. Yet, such loss may prompt a decline in medical status. Eyeglasses and hearing aid benefits, for example, are specifically excluded by statute (eyeglasses are generally cov-

ered only after cataract surgery). However, eye care, including glasses, can slow visual loss and reduce the incidence of disabling falls. Falls are often the cause of a broken hip, requiring hip repair or replacement surgery, rehabilitation, and a need for long-term personal care. Similarly, hearing loss is a major cause of isolation and a risk factor for depression (Cassel, et al., 1999).

Rehabilitative services

Unlike expectations for acute conditions, functional (and clinical) improvement is not expected for many chronic conditions. Instead, the goal may be to maintain a level of function, or in other instances, slow the deterioration of function. For many beneficiaries with chronic conditions, rehabilitative services are a means of achieving this goal. Coverage for outpatient occupational therapy, physical therapy, and speech therapy, however, is sometimes denied by the Medicare carriers unless improvement or restoration of function is expected.

Case Study

A 68-year-old woman had a number of falls over the past few years, the most serious of which resulted in a broken tooth. One day she twisted her foot as she stepped on the bottom stair of her home and broke five bones in her leg. After five days in the hospital recovering from surgery, she was discharged to her home, with arrangements made for daily visits by a physical therapy aide. No one addressed why she fell and what she could do to keep from falling again.

A year after her surgery, she felt that her balance was more precarious than before her fall. She had become fearful of walking and began limiting her outside activities. She made an appointment with her orthopedist to relay her concerns. He said that the leg had healed fine and no further treatment was warranted. After telling her internist of her concerns, he referred her to a neurologist to rule out a brain tumor. The neurologist said that mild neuropathy could possibly be the cause of her falls. He prescribed medication for the neuropathy but offered no other suggestions.

Her daughter insisted that there must be something that could be done to prevent further falls. She had heard the term “balance therapy” and told her mother to discuss it with her orthopedist. During her next office visit, the orthopedist claimed he had never heard of it. He also said he doubted the neurologist’s neuropathy diagnosis.

Mother of chronic care panel staff person

According to the Medicare Part A Manual for intermediaries (for beneficiaries receiving post-hospital coverage at a skilled nursing facility or by a home health agency), Medicare covers skilled therapy to prevent deterioration or maintain capabilities. However, for rehabilitation services covered under Part B, the Medicare Part B Manual for carriers states that coverage is discontinued when a beneficiary reaches his/her full rehabilitation potential. It recognizes, however, that a therapeutic maintenance program to delay or minimize muscular and functional deterioration in patients suffering from a chronic condition may be considered reasonable and necessary. Yet Medicare will only reimburse for a minimal number of therapeutic sessions to instruct the beneficiary or family members in carrying out the maintenance program. It does not cover assistance in implementing the plan.

Durable medical equipment

Durable medical equipment (DME) is another instance where Medicare policies fall short of helping beneficiaries to maximize function and quality of life. DME coverage policy

requires that the equipment be used primarily in the home. This policy is an obstacle, particularly for younger, disabled beneficiaries who would like to try to work outside the home, as well as those would prefer to lessen their dependence on others by doing their own shopping and other errands. For example, beneficiaries who have trouble walking may need the use of a motorized scooter outside of the home but have difficulty getting it approved because of the “primarily in the home” requirement.

Home health

Under Medicare statute, home health benefits require that a beneficiary be “confined to the home,” a condition characterized by the word “homebound.” The basis of this requirement is that if beneficiaries are able to leave their home to obtain care in an outpatient facility, they do not require home care. Many beneficiaries who need this benefit, however, are able to leave the home occasionally or with substantial assistance (e.g., with a motorized wheelchair or carried to the car by family members).

Case Study

A 78-year-old man with mild dementia was hospitalized with pneumonia. After he was admitted to a nursing home, he received physical therapy under Part A of Medicare. After his Part A benefits ran out, his son hoped that the physical therapy would continue under Part B, but the nursing home concluded that his condition would not improve. The physical therapist wrote up a maintenance plan for him (reimbursed by Medicare) but no assistance was provided to help implement the plan. He was re-hospitalized that year for pneumonia and then again released to the nursing home.

After four hospitalizations, the son requested ongoing physical therapy services. He claimed his father’s hospitalizations were the direct result of lack of activity. The father’s physician concurred. The physical therapist, however, was hesitant to reinstate services because she did not believe that the Medicare carrier would approve coverage. She told the son that though ongoing physical therapy would prevent future hospitalizations, it could not be expected to improve his medical condition—a requirement for rehabilitation coverage under Part B.

Son of Medicare beneficiary

The current statute describing the “homebound” definition reads as follows:

For purposes of paragraph (2)(C)[home health agency certification], an individual shall be considered to be “confined to his home” if the individual has a condition, due to an illness or injury, that restricts the ability of the individual to leave his or her home except with the assistance of another individual or the aid of a supportive device (such as crutches, a cane, a wheelchair, or a walker), or if the individual has a condition such that leaving his or her home is medically contraindicated. While an individual does not have to be bedridden to be considered “confined to his home,” the condition of the individual should be such that there exists a normal inability to leave the home, that leaving home requires a considerable and taxing effort by the individual. Any absence of an individual from the home attributable to the need to receive health care treatment, including regular absences for the purpose of participating in the therapeutic, psychosocial or medical treatment in an adult day-care program that is licensed or certified by a State, or accredited, to furnish adult day-care services in the State shall not disqualify an individual from being considered to be “confined to his home.” Any other absence of an individual from the home shall not so disqualify an individual if the absence is of infrequent or of relatively short duration. For purposes of the preceding sentence, any absence for the purpose of attending a religious service shall be deemed to be an absences of infrequent or short duration.”

Sections 1814(a) and 1835(a) Medicare statute

The statute did not initially specify what the term “homebound” meant; however, over the years, Congress has included a definition of “homebound” in the statute and expanded it, though the definition is not clear-cut. Congress enacted two exceptions to the homebound rule in 2000: it allowed for those who leave home to go to church or to

attend adult day care centers.¹² These exceptions affected very few beneficiaries.

In cases where the statute is not specific, CMS provides guidance to carriers through its manuals. In July 2002, CMS altered its home health agency manual to be more sensitive to cases such as the David Jayne case (see case study on page 21). The manual expands the list of examples used to illustrate occasional absences from the home and notes that the list is still not all-inclusive. It adds ALS and other neurodegenerative disabilities to examples of conditions that may indicate a beneficiary is homebound. It suggests that “homebound” determinations be made over a period of time, not on a daily or weekly basis, so a few special trips outside the home would not be used to disqualify a beneficiary who has a normal inability to leave the home.

Because there is no clear-cut policy for “homebound” in both statute and CMS manuals, carriers have considerable discretion in defining it. Defining “homebound” brings into question: for how long could a beneficiary leave home, how often could they leave, and for what purpose could they leave and still qualify as “homebound?” Thus, because the policy is unclear and because the carriers vary in its enforcement, beneficiaries are faced with the dilemma of remaining at home vs. leaving home and risking loss of their home health care.

In addition to meeting the “homebound” requirement, beneficiaries with chronic conditions face other barriers to home health nursing coverage. To qualify for home health nursing services, a beneficiary must need “**skilled** nursing care... on an **intermittent**

¹² BIPA, Section 507.

Case Study

A 41-year-old man with amyotrophic lateral sclerosis (ALS, also known as Lou Gehrig's disease) is dependent on home health care. His degenerative neuromuscular condition had caused his muscles to atrophy, leaving him unable to eat, breathe, or move on his own. He is attached to a life support system and a computerized voice simulator. His life depends on a ventilator, intravenous feeding, and daily care from a home health aide. He leads an active life by leaving his home in his motorized scooter. He is also an advocate for changing the homebound rule. His home health agency discontinued its services after he attended a football game. The agency reinstated its services after members of Congress became involved and the beneficiary agreed to pay his home health provider for any claim denied by Medicare.

David Jayne, disability advocate

basis,” along with being homebound. (Qualifying criteria for receiving physical and speech therapy in the home include meeting the homebound definition but does not require the need for skilled nursing care or care on an intermittent basis.) The “skilled” nursing care requirement excludes those who need only personal care. The “intermittent” requirement conflicts with a basic characteristic of chronic conditions: that the condition is ongoing. Thus, the home health benefit does not meet the needs of those with chronic conditions, particularly younger disabled beneficiaries who could leave the home with the support of home health nursing services.

D. SELF-MANAGEMENT

The goals of clinical self-management programs are increased patient knowledge, better adherence to the regimen, timely adaptation of the regimen to change in disease status, improved disease control, and, ultimately, reduced complications. Beneficiaries with diabetes, for example, may need to monitor their own glucose levels, regulate their food intake, adjust their insulin dosage, and self-inject insulin. This takes considerable training, knowledge, and discipline on the part of the beneficiary.

Comprehensive self-management, however, includes more than clinical self-management. A more complete picture of the physical, psychological, functional, and quality of life tasks that beneficiaries with chronic conditions must deal with include:

- engaging in activities that promote health and build physiological reserve, such as exercise, proper nutrition, smoking cessation, social activities, and sleep;
- interacting with health care providers and systems and adhering to recommended treatment protocols;
- monitoring their own physical and emotional status and making appropriate management decisions on the basis of symptoms and signs;
- managing the impact of the illness on their ability to function in important roles, on emotions and self-esteem, and on relations with others. (Wagner, et al., 1996)

Despite the importance of self-management for chronic conditions, many beneficiaries receive little or no self-management support. This may be due, in part, to providers' lack of training and tools in self-management or because they have little time to spend on it.

Health plans are more likely than private practice providers to provide support for such activities—including group classes, meetings with nurse educators, and computer programs to monitor and support self-management. Some health plans contract the self-management support out to disease management firms.

Though appropriate self-management is important for all chronic conditions, it may require major involvement of caregivers in the case of dementia and those with other severe cognitive limitations. Such cases may require training for the caregiver, more intensive care from a physician, or home and community-based care.

E. FAMILY PARTICIPATION

Many beneficiaries depend on their families to coordinate their medical care and to provide assistance with activities of daily living. Family members are often the major providers of advice and guidance to beneficiaries about choice of health plans, of providers, and of treatment. They also deal with the “blizzard of paper frequently associated with chronic illness and high service utilization.” They find, however, that Medicare and its providers do not recognize the crucial role that the family plays in beneficiaries’ care and that Medicare and its contractors make little effort to inform or educate them (Vladeck, 2002).

Caregivers involved in their family member’s care often have a difficult time engaging the beneficiary’s physicians. While the beneficiary

is the “customer” in this setting, family members can often be extremely helpful to both beneficiaries and physicians. When they accompany a beneficiary to a medical appointment, the physician may spend insufficient time answering their questions and addressing their concerns. Caregivers who would benefit from discussing the beneficiary’s diagnosis and treatment plan with the physician without the beneficiary present may not given the opportunity to do so.

F. SUPPLEMENTAL COVERAGE

Medicare does not cover a substantial share of beneficiaries’ health care spending. Uncovered costs include Part B premiums, deductibles, and coinsurance, as well as for services that Medicare does not cover. Medicare also does not have an annual or lifetime cap that limits beneficiaries’ out-of-pocket spending beyond a certain level, even if the expenses are for covered services. It does not, for example, pay for hospital stays beyond 90 days per benefit period and skilled nursing facilities beyond 100 days.¹³ There is also no limit on coinsurance. Three percent of beneficiaries are projected to exceed \$5,000 in total cost sharing for covered services in 2000 (MedPAC, 2002b). Approximately 6,000 beneficiaries exhaust their lifetime reserve inpatient hospital days each year (Vladeck, 2002).

Those with chronic conditions have higher out-of-pocket expenditures than those with no chronic condition. As shown in Table 2 (see page 23), for those with no supplemental coverage in 1996, mean annual out-of-pocket

¹³ Benefit period begins the day the 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. Medicare may help pay for an additional 60 inpatient hospital days through a beneficiaries’ lifetime reserve of 60 days. Reserve days may be used only once in a lifetime.

Table 2

**Mean Annual Out-of-Pocket Spending Per Person Over Age 65,
by coverage status and number of chronic conditions, 1996**

Coverage status	All	Number of chronic conditions			
		None	1	2	3+
Medicare only	\$924	\$455	\$643	\$966	\$1,492
Medicare/private	\$910	\$484	\$636	\$875	\$1,394
Medicare/Medicaid	\$434	\$262	\$247	\$447	\$649

Source: Hwang, W., et al., 2001.

Note: Out-of-pocket expenditures as reported in MEPS represent self-reported payments for coinsurance and deductibles, as well as cash outlays for services, supplies, and other items not covered by Medicare. Medicare and other health insurance premiums were not included in the analysis.

expenditures for beneficiaries with three or more chronic conditions was \$1,492 compared to \$455 for those with no chronic conditions. Those with private supplemental insurance face similarly large out-of-pocket expenditures (\$1,394 for those with three or more chronic conditions compared to \$484 for those with no chronic conditions). Those with both Medicare and Medicaid have substantially lower out-of-pocket costs, though these expenditures may be even more significant to low-income beneficiaries.

Supplemental coverage helps close Medicare's gaps. In 1999, 87 percent of beneficiaries with chronic conditions had some supplemental coverage. Such coverage options include individually purchased Medigap, employer-sponsored insurance, Medicaid, and M+C. Coverage options, however, are not available or affordable to all. Disabled beneficiaries were less likely than the aged to have supplemental coverage: 28 percent of the disabled lacked supplemental coverage, while 10 percent of the aged lacked such coverage (Kaiser Family Foundation,

2001). (See page 15 for a discussion of prescription drug coverage.)

- Employer-sponsored health insurance (most of which is retiree insurance) covers 33 percent of beneficiaries. These benefit packages are almost always more generous than Medigap policies and M+C plans and almost all have an annual cap. The percentage of firms with 200 or more workers offering retiree health benefits, however, fell from 41 percent to 34 percent from 1999 to 2001. The generosity of such coverage also has declined and many employers are considering increases in premiums or cost sharing for retirees in the future (Kaiser Family Foundation, et al., 2002).
- Individual Medigap policies are purchased by 24 percent of beneficiaries (Tapay and Smolka, 1999). Medigap offers protection against the cost of deductibles and copayments for Medicare-covered services. Most policies, however, offer no assistance in defraying the cost of services that Medicare does not cover. Nationally, the

average annual 1999 Medigap premium was \$1,311. From 1999 to 2000, premiums for Medigap plans without prescription drug coverage rose by 4 to 10 percent. Premiums for the three Medigap plans offering prescription drug coverage increased even more rapidly—by 17 to 34 percent (GAO, 2002).

Aged beneficiaries are granted a six-month open enrollment period beginning on their first day of Medicare enrollment. During this period, an insurance company cannot deny Medigap coverage, place conditions on a policy, or charge higher premiums because of pre-existing medical conditions. Those who do not buy a Medigap policy during the open enrollment period lose these protections.

Disabled beneficiaries have limited access to Medigap coverage. They do not have the federal Medigap protections that the aged do, including a mandated open enrollment period. Instead, Medigap protections must be developed and implemented at the state level.

Only 19 states mandate an open enrollment period and only two (NY and MO) limit premiums. Consequently, disabled beneficiaries account for only one percent of Medigap policyholders (Fox, et al., 2002).

- M+C plans are available to about 59 percent of Medicare beneficiaries in 2003 (though less than 10 percent of beneficiaries in rural areas have access to at least one M+C plan) and about 14 percent of all beneficiaries are enrolled in a M+C plan (CRS, 2002). However, plan withdrawals from the M+C program have caused some enrollees to choose new M+C plans or return to the

original Medicare program. After the rapid growth rate of Medicare managed care enrollment in the 1990s, enrollment reached a peak in 1999, with almost 17 percent of beneficiaries enrolled, and has declined since then. Over this same period, mean premium and cost-sharing levels in M+C plans increased, while coverage of prescription drugs and other benefits not covered under original Medicare (e.g., hearing services and preventive dental benefits) were reduced (Achman and Gold, 2002).

- Medicaid is available to those with low incomes, with 17 percent of all beneficiaries dually eligible for both Medicare and Medicaid. Most (83 percent) of dual eligibles receive full Medicaid benefits, including comprehensive prescription drug coverage and full payment of Medicare premiums and cost sharing requirements. The rest (17 percent)—generally those with slightly higher incomes—receive assistance with premiums and/or copayments and deductibles through Medicare Savings Programs (Kaiser Family Foundation, 2001). Despite efforts to increase enrollment in these programs, only 47 percent of those who meet the eligibility requirements are enrolled. Low enrollment may be due to lack of awareness of the programs, confusion about eligibility requirements, the time and effort costs of enrolling, and a “welfare stigma” associated with Medicaid (DHHS, 1999).

The more chronic conditions a person has, the more likely they are to have supplemental coverage. While 82 percent of beneficiaries without chronic conditions have supplemen-

tal coverage, the percentage rises to 90 percent for those with five or more chronic conditions. This appears to be explained by beneficiaries with chronic conditions' higher rates of Medicaid coverage: the more chronic conditions a beneficiary has, the more likely they are to have Medicaid (10 percent of beneficiaries without a chronic condition have Medicaid; 21 percent of those with five or more chronic conditions have Medicaid.)

Beneficiaries who cannot afford out-of-pocket expenditures may rely on relatives or friends to help them pay for health care. Those who cannot rely on relatives or friends may delay care or forgo other necessities. Beneficiaries most at risk of delaying or going without care are those in poor health, those who are disabled, the poor, and those without supplemental insurance. A recent MedPAC analysis found that 17 percent of beneficiaries in poor health delayed care due to cost, as did 18 percent of disabled beneficiaries, 10 percent of those within the 125 to

200 percent of the federal poverty standard, and 20 percent of those without supplemental insurance. It concluded that though those with incomes just above the poverty level are most at risk, substantial proportions of beneficiaries with higher incomes, including those with supplemental coverage, also appear to be at risk from high health care costs (MedPAC, 2002b).

Medicare's lack of support for persons with chronic conditions may be more of a problem for lower and middle-income beneficiaries than for the wealthy, but the care and reimbursement systems pose difficulties for almost all beneficiaries. Both the wealthy and the poor may find that their providers do not coordinate their care with their other providers, their providers devote little attention to preventive measures to maximize health, function, and quality of life, and they receive insufficient self-management instruction.

Chapter 3: The Medicare Program Faces — As Well As Poses for Providers — Considerable Barriers to Chronic Care¹⁴

In the panel's view, Medicare has failed to adequately support providers in their treatment and management of chronic conditions. Its fee-for-service reimbursement system does not reimburse for many of the services and tools important for the care of beneficiaries with chronic conditions, nor does it offer providers the flexibility to utilize new and efficient methods of operation. In this and other respects, Medicare reflects the broader health care system in which it exists.

A. MEDICARE'S SIMILARITY TO THE GENERAL HEALTH CARE SYSTEM

Medicare's benefit and reimbursement structure generally mirrors that of the U.S. health care system. Major characteristics of the general U.S. health care system are:

- focus on acute care and curative treatments;
- limited implementation of promising tools and techniques for managing care (e.g., evidence-based protocols, health assessments, telephone follow-up care, self-management support);
- provider reimbursement systems that do not support chronic care.

Such characteristics are perpetuated through medical education and training, making the acute care construct of the U.S. health care system difficult to change. However, because

Medicare is the largest health care payer in this country and because its beneficiaries are more likely to have chronic conditions, Medicare's efforts to improve chronic care to its beneficiaries should also improve the care provided by the general health care system.

B. LEGAL AND ADMINISTRATIVE CONSTRAINTS

Barriers to chronic care may be even more pronounced for the Medicare population than for the general health care system. First, the needs of the Medicare population are greater than that of the general population. Medicare beneficiaries are over twice as likely to have a chronic condition than the non-Medicare population. They are also approximately three times more likely to have a functional limitation (Partnership for Solutions, 2001). Second, under law, CMS is limited in its authority over providers, as it is not permitted to "exercise any control over the practice of medicine or the manner in which medical services are provided." While health plans can impose requirements on their providers, CMS is expected to function primarily as a claims payer and is unable to use basic care management tools to try to improve the health care delivery system (Berenson, 2002).

The basic structure of Medicare coverage makes Medicare's policies on chronic care

14 Much of this chapter is based on two papers written for the study panel: "Confronting the Barriers to Chronic Care Management in Medicare," by Robert Berenson, and "Round Pegs and Square Holes: Medicare and Chronic Care," by Bruce Vladeck.

resistant to change. Medicare’s statutes did not envision ongoing treatment of chronic conditions when they were written in 1965. Despite many changes in our society and medical system—in the demographic characteristics of beneficiaries, medical technology, and care delivery—some statutes that impede optimal chronic care services remain unchanged. One such example is coverage for inpatient services that is still tied to the concept of “spell of illness.” This concept limits inpatient care to 90 days and skilled nursing facility care to 100 days per spell of illness (Section 1861(a)). It ignores the fact that many chronic conditions are ongoing and may last for the remainder of the beneficiary’s lifetime.

Medicare’s statutes do not support coverage for many services vital to those with chronic conditions. Medicare payments are prohibited for services that “are not reasonable and necessary for the diagnosis or treatment of illness or injury or to improve the functioning of a malformed body member....” (Section 1862(a)). A strict standard of “medical necessity” is often the rationale for denial of coverage for services and equipment that are important to beneficiaries with chronic conditions. This statute also prohibits payment for “personal comfort items...eye examinations...hearing aids...custodial care...and dental services.” Also, nursing services in the home are covered by Medicare only when a beneficiary is “homebound,” and in need of “skilled” services on an “intermittent basis.”

As stated on page 14, preventive health benefits were excluded from coverage in the original Medicare statute. Over time, Congress has added a number of preventive health benefits to Medicare. Congress’ decisions

about which preventive health services to include, however, have been *ad hoc*, and the resulting set of benefits does not reflect the consensus of experts in the field of prevention and health promotion, namely those recommendations of the U.S. Preventive Services Task Force (USPSTF). For example, some services that received the endorsement by the USPSTF for the over-age-65 population remain uncovered (e.g., blood pressure screening, cholesterol measurement, hearing impairment screening), while others that were not recommended were added to the benefits package (e.g., prostate cancer screening by PSA and digital rectal exam) (MedPAC, 2002b).

Coverage decisions are based on statute but require interpretation by CMS and its contractors. CMS may issue national coverage decisions, memoranda, or specify its intentions in manuals for intermediaries or carriers. National coverage decisions grant, limit, or exclude Medicare coverage for a specific medical service, procedure, or device and are binding on all contractors. In general, national coverage decisions are made for decisions with broader policy and payment implications and where there is a sufficient basis on which to make informed decisions. National coverage decisions are rare—fewer than 400 have been issued since the inception of the Medicare program. Thus, most coverage decisions are made by local carriers and fiscal intermediaries.

Four examples highlight the complexity of Medicare coverage policies and how intermediaries and carriers influence benefit approvals and denials:

- The line between covered “treatment services” and uncovered services that involve “personal comfort” or “custodi-

al care” is not clear-cut. For example, special mattresses or wheelchair seats designed to reduce the risk of decubitus ulcers can be an important preventive measure for older patients with chronic conditions. Medicare carriers may be willing to reimburse for such items only after beneficiaries have developed actual symptoms (Vladeck, 2002).

- Medicare’s requirement that beneficiaries be “homebound,” to receive home health services is subject to interpretation. Carriers differ in their definitions of the statute, including the phrases, “normal inability to leave the home, that leaving the home requires a considerable and taxing effort,” and that absences must be “of infrequent or of relatively short duration.” Advocates believe that some carriers are inappropriately denying home health services to beneficiaries who would clearly benefit from them because of a strict interpretation of “homebound.”
- Medicare’s prohibition against paying for services that “are not reasonable and necessary” leads to denials for outpatient rehabilitation in those cases where a beneficiary is not expected to improve. Beneficiaries with chronic conditions who receive occupational, physical, or speech therapy to maintain function or limit a decline in function are denied such services because the carriers deem them to be unreasonable or medically unnecessary based on this “improvement” measuring stick.
- Until recently, some intermediaries and carriers restricted or denied rehabilitation and mental health services to patients, in part, because the beneficiaries’ primary diagnostic was Alzheimer’s

disease or another form of dementia. Here, “treatment of illness” was interpreted to mean active treatment of the underlying disease, rather than intervention in the functional consequences of disease. Such patients were denied coverage for rehabilitation services on the assumption that a person with dementia cannot “learn,” even though research and practice have demonstrated the success of appropriate therapies in rehabilitation and in the prevention of functional decline (Fried, 2000). (In September 2001, to correct this and to clarify policy, CMS issued a memo to all of its intermediaries and carriers which stated that contractors may not install edits that result in the automatic denial of services based solely on the ICD-9-CM codes for dementia.)

Lack of clarity regarding coverage decisions may influence providers to withhold provision of the service. Providers may tell the beneficiary that Medicare will not cover the service, or require the beneficiary to sign a statement that if Medicare does not agree to cover the service, the beneficiary will pay the charges. This often occurs when the provider believes that the beneficiary will not or cannot pay if Medicare does not. It may also influence beneficiaries to go without care they believe may be useful to their condition.

C. ORIGINAL MEDICARE’S FEE-FOR-SERVICE REIMBURSEMENT SYSTEM

Original Medicare’s fee-for-service reimbursement system is not designed to promote effective chronic care. Reimbursement is based on payment to individual providers, with particular emphasis on physicians. In general, it pays for services provided by non-

physicians (other than those specifically authorized) only when they are billed by the physician as “incident to” the physician’s services (the provider must be a direct employee of the physician and the service must be provided under the physician’s direct personal supervision, which usually requires the physical presence of the physician). This requirement discourages a team approach to care and delegation of major aspects of the protocol to nurses, pharmacists, and other non-physician colleagues. In addition, fee-for-service reimbursement pays providers for discrete services, such as procedures and office visits. It does not, however, pay for other means of communication that may be conducive to care, including telephone and email encounters. From a budgetary perspective, there is concern that if original Medicare reimbursed for such services, then utilization and expenditures, as well as providers’ administrative costs, would increase dramatically. Payment for such services would also make fraud and abuse detection more complex because it would be difficult to track these encounters for billing purposes.

As an “any willing provider” program, all clinicians with an appropriate license are eligible to participate in Medicare. Thus, except in demonstrations, CMS cannot pay more to reward high-quality providers or reduce reimbursement for low quality of care. Also, if reimbursement for a service is offered, it must be payable to all participating physician types, whether or not they have modified their practice styles. In a CMS chronic care initiative to provide reimbursement for care coordination activities, CMS staff was surprised to find that podiatrists billed for this service more often than any other physician type. CMS, however, was powerless to target

this reimbursement to relevant physician types.

Original Medicare’s fee-for-service system does not foster coordination and high-quality care across various levels of providers. For example, a beneficiary who receives a hip replacement often undergoes surgery in the hospital, is transferred to a skilled nursing facility for rehabilitative care, and then continues to receive physical therapy services at home. Instead of paying for discrete services, CMS’ Medicare Partnership for Quality Services Demonstration (previously called the Centers of Excellence) has bundled payment for services to high-volume providers who work together to provide high-quality care. The demonstration has targeted invasive procedures, namely selected cardiovascular surgery and hip and knee replacement, but has not included care for chronic conditions.

Medicare’s reimbursement for primary care does not support quality chronic and geriatric care. Reimbursement for routine primary care visits is insufficient for the care of many with chronic conditions, as care for this population usually takes a considerable amount of time, particularly when self-management and multiple conditions are addressed. Older patients tend to require more time with their providers than younger patients, and disabled patients more time than non-disabled patients. Reimbursement rates also offer little incentive for primary care practitioners to coordinate specialty care. In addition, Medicare does not reimburse for time spent with family members unless more than half of the visit is dedicated to a coordination-related activity, and it does not compensate for time spent with a family member without the beneficiary present.

Though Medicare’s resource-based relative value scale (RBRVS)–based Physician Fee Schedule has somewhat alleviated the reimbursement gap between primary and specialty care, its coding and classification of the Evaluation & Management (E&M) services is a barrier to chronic care. E&M codes account for almost half of Medicare-paid physician services. These codes fail to adequately reflect the additional complexity and time requirements associated with care for many beneficiaries with chronic conditions. Though codes and additional payments were added for prolonged services with physician-to-patient contact, few physicians actually bill for them. In addition, its bundling of Medicare payments for care management services into other services disproportionately and unfairly impacts practitioners who provide care to elderly patients with multiple chronic conditions (payment for care plan oversight is available only to providers of home health agency and hospice patients) (Health Policy Alternatives, 2002).

D. MEDICARE+CHOICE OPPORTUNITIES TO IMPROVE CHRONIC CARE

The M+C program created opportunities to improve beneficiaries’ care. Though Medicare had a risk contracting program that was expanded in 1982 under TEFRA, M+C’s enactment in 1997 came at a time when techniques for managing care were more available.¹⁵ Such techniques include assignment of primary care providers, assignment of care managers to high-cost patients, telephone advice lines, wellness support programs (e.g., patient self-care education, preventive services), and disease manage-

ment. Health plans also updated their computer systems to generate patient reminder letters, physician profiles, and disease registries. Many believed that prepaid, capitated reimbursement provided incentives to control costs, as well as to keep beneficiaries healthy. It was hoped that as managed care evolved, its techniques would be incorporated into original Medicare (Gluck and Ginsburg, 1998, and Fox, et al., 1998).

Nevertheless, there was a lack of evidence that M+C plans, in the aggregate, increased or decreased quality when compared with the original Medicare sector. One factor may be that the Balanced Budget Act of 1997 constrained payments to M+C plans during a period when health care costs were rising sharply: beginning in 1998, most M+C plans were limited to a two percent annual increase in capitation. The lack of impact is also likely the result of other factors:

- Few health plans made substantial changes to their care systems. Though some plans instituted targeted care management programs, most plans concentrated on controlling costs, mainly by reducing inpatient utilization and negotiating reimbursement rates. Managed care techniques to improve the quality of chronic care were not widely adopted.
- Managed care techniques may be more effective in closed model systems (e.g., group, staff model HMOs); instead, the majority (64 percent) of M+C enrollees are enrolled in an independent practice association (IPA) model (CRS, 2002). IPAs contract with physicians in solo practice or with associations of physi-

¹⁵ Tax Equity and Fiscal Responsibility Act of 1982.

cians. IPAs usually have little influence over physicians, as most function as a discounted fee-for-service third-party payer, with its physicians operating under the constraints of fee-for-service reimbursement and contracting with multiple health plans.

- Physician practice patterns are difficult to change.
- Risk adjustment has been difficult to implement. Though legislated by Congress, its implementation has been postponed and a phase-in plan put in place. As a result, health plans did not market to beneficiaries with chronic conditions, and due to fear of adverse selection, have lacked incentive to be known as leaders in chronic care.
- Enrollees' ability to switch plans prompted a lack of continuity. This discouraged plans from investing in services for which only long-term benefits were expected.

Though “good” chronic care (as outlined on page 11) should be easier to provide in well-organized, prospectively reimbursed health care organizations (e.g., health plans that have defined populations, strong clinical cultures, comprehensive services, a preventive orientation, data systems, and centralized resources such as patient education), experience suggests that regardless of organizational and financial arrangements, patients with chronic conditions and their providers are confronted with a set of formidable obstacles to achieving quality clinical care and self-management (Wagner, et al., 1996).

E. GRADUATE MEDICAL EDUCATION

Medicare providers' education and training contributes to poor chronic care practices. Medicare provides substantial financial sup-

port for graduate medical education (GME). Its direct graduate medical education (DGME) funding pays for the direct costs of training of medical residents in teaching hospitals, while indirect medical education (IME) payments are adjustments to diagnosis-related group (DRG) rates under the Medicare prospective payment system (PPS) to recognize the higher costs of teaching hospitals. (DGME expenditures were approximately \$3 billion in 2001; IME expenditures, \$5.2 billion.) At issue is whether physicians are being appropriately trained by these hospitals to care for an aging population with chronic conditions.

Residency training takes place largely in hospitals. Because most chronic care is—and should be—provided in outpatient facilities, medical residents complete their training with insufficient experience managing chronic conditions. Their hospital experience also provides them with few home care and nursing home experiences. In a 2001 survey, physicians said that their chronic care training is inadequate (see Table 3 on page 33).

There is also a shortage of primary care and specialty physicians trained in geriatrics. Providers who are trained in geriatric medicine are much better prepared to treat older patients than those with chronic conditions. Reasons for geriatric medicine training are twofold: first, caring for older persons requires a special body of knowledge and formal training; second, geriatric concepts of function, family participation in care, and care management are also core principles for chronic care. Almost all physicians (with the possible exception of pediatricians, pathologists, and radiologists) should be trained in geriatric principles. However, in actuality, most physicians have little education and training in the care of older people.

Table 3

Percentage of Physicians Who Believe Their Chronic Care Training to be Inadequate, 2001

Topic	Percent
Coordination of in-home and community services for people with chronic illness	66%
Approaches to educating patients with chronic illness	66%
Management of psychological and social aspects of chronic illness care	64%
Nutrition in chronic illness	63%
Management of chronic pain	63%

Source: Partnership for Solutions, 2002.

In the U.S., only three of 125 medical schools have a full department of geriatrics. There are currently fewer than 600 faculty members in the U.S. who list geriatrics as their medical specialty (geriatrics is a subspecialty of internal medicine and family practice). Most medical schools do not require courses in geriatrics. Out of 98,000 residents in 1999, only 466 individuals chose a geriatrics subspecialty (International Longevity Center, 2000). Also, CMS, the primary funder of GME, had supported a two-year geriatrics fellowship but has cut this support to a one-year fellowship. A one-year fellowship, however, does not provide the training needed for an academic position. The lack of academic geriatricians is a problem because there are few geriatric educators to train geriatricians and general practice physicians in geriatric principles and techniques, and few academic researchers who specialize in geriatric populations.

F. IMPROVED CARE SYSTEMS AND TECHNIQUES

A number of techniques have been developed to help providers manage care. These

include protocols and guidelines, disease management, care and case management, and comprehensive geriatric assessment. Though all could enhance the quality of chronic care, their implementation has been hampered by lack of agreement as to how to best provide them.

Lack of standardized guidelines is a barrier to effective chronic care. For some chronic conditions, there are no well-recognized evidence-based guidelines and few guidelines exist for the management of two or more comorbid chronic conditions. In cases where evidence-based guidelines are available from multiple sources, providers are not in agreement with which to use. Even when guidelines are formally accepted by provider specialty organizations, adherence to guidelines has been limited and sporadic. Providers practicing in small to mid-sized groups have been least likely to use evidence-based guidelines; providers working in a health plan or group practice that support use of guidelines and assist practitioners to comply with them seem to be most successful with their use (Wagner, et al., 1996).

Disease management (defined in this report as the systematic effort to improve the management of a condition) generally incorporates the use of appropriate clinical guidelines with treatment protocols and information systems specifically designed for a given disease. It may also include self-management training and medication management. There are two forms of disease management: a contracted “carve-out” model and a primary care-based model. In the carve-out model, care is provided through contracts with disease-management companies. Such programs usually focus on a single condition and separate such care from primary care. Because their goal is to save money for their clients, they target high cost patients for whom savings can be achieved in the short-run. In contrast, the primary care-based model works by improving the primary care system to enhance outcomes. It also works to coordinate primary care with specialists when appropriate. This type of disease management better serves those with multiple chronic conditions and those whose illness has not yet incurred high expenditures (Bodenheimer, 1999). Evidence of quality improvements as a result of disease management is growing, though the evidence is mixed on whether such efforts save money.

Though there is general agreement that care within original Medicare should be managed, there is less agreement as to how to manage it and who should manage it. As with disease management, there is no consistent definition of case management. The term has a range of meanings, from strictly administrative functions (e.g., filling out insurance forms and

arranging transportation) to sophisticated clinical management (e.g., medication adjustment). According to Wagner, growing evidence suggests that sophisticated clinical case management can improve basic care for a number of serious chronic conditions (Ferguson and Weinberger, 1998). There is continued debate, however, as to who should serve as beneficiaries’ case managers (options include primary care physicians, specialists, nurse case managers, social workers, care teams, and disease management companies). Evidence indicates that the general case manager who is not an integral part of the medical care team, has little if any impact on outcomes.¹⁶ As stated earlier, the Medicare Fee Schedule does not generally provide for a separate payment for case management services, as such services are generally supposed to be incorporated into other payments.

Other programs to manage chronic care are implemented under the name “care management.” Such programs tend to move beyond clinical care management and work to improve function and quality of life. For example, the HMO Workgroup on Care Management has designed targeted interventions to address common geriatric conditions, including physical inactivity, falls, medication-related complications, dementia, depression, undernutrition, and urinary incontinence (HMO Workgroup on Care Management, 2002).¹⁷ The health plans and provider groups who have implemented these interventions have the organizational capacity to offer such programs to their members. Capitation offers them the flexibility to provide services that are most appropri-

16 See page 42, “Medicare Case Management Demonstrations for High-Cost Medicare Beneficiaries” and Ferguson and Weinberger, 1998.

17 The HMO Workgroup on Care Management is a group representing staff, group, and IPA-model health plans and large group practices that are capitated by health plans for a significant portion of revenues.

ate to their members' needs and incentives to keep patients healthy, as well-person care can be less expensive to provide than acute, urgent and inpatient care.

Geriatric assessment and management is particularly relevant to the aged and those with chronic conditions. It aids in the diagnosis of functional ability, physical health, cognitive and mental health, and the socioenvironmental situation of beneficiaries. Tools such as comprehensive geriatric assessment (CGA) may assist providers in their diagnosis and then allow interventions to slow physical, functional, and mental decline. There is no single accepted standard for CGA, however, as protocols vary widely in purpose, comprehensiveness, staffing, organization, and structural and functional components. Heterogeneous results are to be expected and have been found among the various trials (Stuck, et al., 1993, and Cohen, et al., 2002). The geriatric community is now working to more closely link the assessment with management and treatment. Though it has lobbied long and hard for coverage for CGA under Medicare, payment has not been approved.

Fragmentation of the Medicare and Medicaid systems is a barrier to care. For those who are dually eligible for both Medicare and Medicaid, these distinct systems make it difficult to integrate long-term care with the rest of medical services. Each has different eligibility criteria, coverage standards, and provider reimbursement systems. Though CMS oversees both Medicare and Medicaid, the federal government runs Medicare, while the states run Medicaid. Within CMS there is insufficient integration of its Medicare and Medicaid divisions and no division that is charged with administration of dual eligibles. A NASI case study of dual eligibles with

HIV/AIDS found this caused considerable confusion and discontinuity of care on the part of beneficiaries and providers (Eichner, 2001). Such bureaucratic barriers reflect the politics of developing and implementing new service models for dual eligibles. As dual eligibles comprise 17 percent of all Medicare beneficiaries but 28 percent of Medicare spending, lack of integration of these two systems is inefficient and does not promote high quality chronic care.

G. QUALITY INITIATIVES

Though CMS is technically prohibited by statute to “exercise any control over the practice of medicine or the manner in which medical services are provided,” CMS has implemented initiatives to improve the quality of care of both M+C and original Medicare. As stated earlier in this report, the quality of care received by beneficiaries is heavily influenced by the general (non-Medicare) health system. However, Medicare’s potential influence in the quality sector should not be underestimated. MedPAC’s 2002 quality improvement standard report stated: “As the largest single health care purchaser, Medicare can effectively influence if not set the quality improvement agenda. As with coverage policy, private purchasers often follow Medicare’s lead with respect to quality requirements.” Health care experts interviewed by MedPAC believe that the Medicare program needs to use this leadership position to further stimulate quality improvement efforts (MedPAC, 2002a).

In the Balanced Budget Act of 1997, Congress imposed a set of rigorous quality improvement standards in its requirements for the M+C program. CMS’ quality regulation of M+C is now considered by many to be as rigorous as the most well-developed

private accreditation standards (i.e., JCAHO, NCQA, URAC) (MedPAC, 2002a). Plans must demonstrate their efforts on multiple sets of measures: two quality improvement projects, the Medicare version of Health Plan Employer Data and Information Set (HEDIS), and the Medicare Consumer Assessment of Health Plan Study (CAHPS) survey. These results are released to the public to help it evaluate and compare health plans.

CMS relies less heavily on regulatory requirements to stimulate quality improvement in original Medicare than it does in the M+C program. In order to ensure that a sufficient number of providers participate in Medicare, CMS' quality efforts emphasize a broad network and voluntary efforts, though it does maintain some regulatory requirements. Its basic original Medicare quality initiatives include Conditions of Participation for Part A providers; support for Quality Improvement Organizations (QIOs, formerly called Peer Review Organizations (PROs)); and requirements for providers to conduct periodic patient appraisals through designated assessment instruments. Also, CMS' quality of care reporting requirements for nursing facilities are extensive and it has begun releasing individual nursing facility quality measurement data to the public. CMS is applying performance measures to dialysis facilities and is working to develop them for home health agencies (MedPAC, 2002a).

Despite CMS' efforts to foster quality measurement systems, measures are inconsistent across care settings. Though beneficiaries receive treatment across the spectrum of health care settings, each setting has its own CMS-mandated measures and information systems. For example, nursing homes utilize

the Minimum Data set (MDS); home health agencies, the Outcome and Assessment Information Set (OASIS); and inpatient rehabilitation facilities, the Inpatient Rehabilitation Facility-Patient Assessment Instrument (IRF-PAI). Thus, it is difficult to track beneficiaries' health, function, and quality of life across settings of care. BIPA has required CMS to design standard instruments such that their common elements are readily comparable and statistically compatible.

While HEDIS data are reported on individual M+C plans, quality of care statistics are not reported at the individual physician level or for physician groups—the primary source of care for beneficiaries with chronic conditions. The reporting of such statistics is controversial because of concern that physicians with sicker and more severely chronically ill patients will not rate as well as those with healthier patients. Another constraint is that the number of Medicare patients seen by an individual provider is small (as it is for many group practices), making the quality of care reporting less statistically meaningful than at the health plan level. It is also costly and time-consuming for individual physicians or small practices to collect and analyze data. Nevertheless, physicians can directly influence the quality of chronic care, more so than most M+C plans and other original Medicare institutions (e.g., hospitals, skilled nursing facilities, home health agencies). The National Committee for Quality Assurance (NCQA) is presently working to implement a HEDIS version for large group practices, as a large number of patients may be appropriate for aggregate reports.

Another quality initiative is the development and promotion of accreditation, certification, and performance measurement of chronic

disease management. NCQA, the American Accreditation HealthCare Commission (URAC), and the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) are all implementing such programs. Health plans, vendors, and providers of disease management will have the opportunity to apply for accreditation from one of these three organizations. Program standards will address the periodic update of evidence-based guidelines, measurement and quality improvement activities, and performance measurement and improvement.

H. RESEARCH AND DEMONSTRATIONS

Though it is not written in statute, CMS' innovation is limited by the Office of Management and Budget's (OMB) requirement that demonstration projects be budget neutral. Not only does OMB require that demonstration projects not increase Medicare expenditures to over projected spending in the absence of the demonstration, but in the case of demonstrations enrolling dual eligibles, budget neutrality is calculated separately for each program so that savings in one cannot be used to offset increased spending in the other.

Though the panel commends Congress on authorizing these three chronic care demonstrations described below, the demonstrations are severely constrained by the requirement that they be budget neutral.

- **Coordinated Care Demonstration.** This project tests models of coordinated care for beneficiaries with chronic conditions who represent high costs to the original Medicare program. CMS will pay a monthly all-inclusive rate for the proposed coordinated care services,

which might include coordination with community-based services, transportation, medications, noncovered home visits, and equipment. Statutory Medicare services will be reimbursed as usual. The demonstration seeks to improve the quality of care provided to specific beneficiaries with a chronic illness and manage Medicare expenditures so that they do not exceed what they would have been in the absence of the demonstration. In 2001, fifteen sites were selected for participation.

- **Disease Management Demonstration.** This project targets severely chronically ill beneficiaries with congestive heart failure, diabetes, and coronary heart disease. It requires that prescription drugs be included, with their costs expected to be covered by more efficient provision and utilization of Medicare-covered services and the prevention of avoidable, costly medical complications.
- **Physician Group Practice Demonstration.** This project assesses whether rewards to physicians in group practice can improve service delivery and quality for Medicare beneficiaries, and ultimately prove cost-effective. CMS will encourage physician groups to coordinate their care to chronically ill beneficiaries, give incentives to groups that provide efficient patient services, and promote active use of utilization and clinical data to improve efficiency and patient outcomes. Participating physician groups will continue to be paid under the existing Medicare fee schedules and will receive bonus payments from Medicare savings achieved by the group. Groups will receive 70 percent of the bonus pool solely due to financial

performance, and the remaining 30 percent due to quality performance.

The disease management demonstration requires that selected participants provide prescription drugs to those chronically ill beneficiaries enrolled in the demonstration. Similarly, the coordinated care demonstration requires participating organizations to provide services not covered under original Medicare. Thus, the evaluation of these

demonstrations will be based largely on the participating organizations' ability to manage Medicare costs—at a cost that may not be realistic, while de-emphasizing improvements to quality of care. How chronic care could best be managed under a scenario where Medicare costs could increase—a more realistic scenario—or in the instance where they would be shared by the beneficiaries, will be left untested.

Chapter 4:

Past Initiatives to Improve Care to People with Chronic Conditions Provide Valuable Experience

CMS, health plans, and original Medicare practitioners have implemented initiatives to improve care for people with chronic conditions. These initiatives offer lessons to guide future chronic care programs. This chapter includes lessons learned from six programs, some of which are considered a success, though all have drawbacks and have faced numerous obstacles.

A. INTEGRATED FINANCING AND DELIVERY

Because Medicare does not cover all of the services a beneficiary may need, beneficiaries must piece together services and programs from multiple sources to meet their needs. This results in a patchwork of uncoordinated services. Programs that attempt to integrate the financing and delivery of two or more programs find that each program has its own policies and procedures, making it difficult to design a single coordinated program that meets beneficiaries' needs.

Program coordination problems are most apparent for frail elderly dual eligibles. In an effort to address this, CMS' Medicaid and Medicare divisions and states' Medicaid agencies worked together with advocates of the frail elderly to create a financing mechanism to support coordinated programs. Two CMS demonstrations, Program for All-Inclusive Care for the Elderly (PACE) and Social Health Maintenance Organization (S/HMO), were implemented to test models of integrated financing and delivery programs. Under the Balanced Budget Act of

1997, PACE became a permanent Medicare benefit. According to CMS and Congress, the S/HMO models have not been as successful.

Program for All-Inclusive Care for the Elderly (PACE)

PACE has almost twenty years' experience in fully integrating medical, home and community based care for the frail elderly who are nursing home eligible. The program provides a comprehensive range of preventive, primary, acute, and long-term care. It also includes non-medical services, including meals and adult day care. Participants must be certified as nursing home eligible to enroll. They receive intensive care coordination provided by a multidisciplinary team, which includes a PACE primary care physician, social worker, rehabilitation therapists, as well as nursing, activity, and transportation staff. The PACE-run adult day health centers are co-located with a primary care clinic and enrollees receive the majority of their medical and community-based services here.

PACE sites receive a capitated payment from both Medicare and Medicaid and then pool these funds to provide services. PACE programs generally receive payments 2.39 times greater than the average M+C payment to account for the frailty of PACE enrollees. Medicaid payments are reached through agreement with the state. PACE programs typically pay salaries to primary care medical and social service staff, with most sites contracting with outside entities for hospital and medical specialty services. Capitation incen-

tives support coordination of care and substitution of primary and home and community care for high-cost acute and nursing home care. These savings allow the PACE site to pay for social services, transportation, and mental health care—benefits beyond those typically provided by Medicare and Medicaid.

PACE is widely considered a model of a successfully integrated medical and chronic care program. Most PACE sites have managed a very complex package of care within their budgets. Abt Associates' evaluation of the impact of PACE on participant outcomes reported positive outcomes, including much lower rates of nursing home utilization and in-patient hospitalization, higher utilization of ambulatory services, better health status and quality of life reports, and a lower mortality rate than comparison group members. Also, the benefits of PACE appeared to be magnified for those participants with high levels of physical impairment (DHHS, 1998).

As well regarded as PACE is, growth has been slower than its supporters expected: there are only 25 PACE sites with 7,696 enrollees (2000 average daily census). Widespread replicability may be limited because of high start-up costs (for reserves and when the PACE site must buy or build a building), the relatively small frail eligible dual eligible population (Medicare-only participants are permitted but they must pay the full Medicaid capitation themselves), and because some eligible participants are unwilling to give up their private providers for the PACE site's providers. It is also unclear which factor (or factors) makes PACE successful (is it, for example, the provision of non-medical services, its dedicated and talented staff, or its care team approach?)

Policymakers continue to seek other models that may evolve from PACE.

Social Health Maintenance Organization I and II (S/HMO I and II)

As with PACE, S/HMOs aim to integrate acute, chronic, long-term care, and social services. Care is provided through capitated M+C plans. Participating health plans are expected to control high-cost utilization and authorize additional basic services to substitute for more costly care. Available services are standard Medicare benefits plus some home and community-based services, including personal assistance, transportation, durable medical equipment, and home modification. Outpatient drugs are a covered benefit. S/HMOs also use care coordinators to emphasize community-based services and to coordinate institutional and noninstitutional care. There are over 105,000 Medicare beneficiaries enrolled in the S/HMO demonstration.

S/HMO I has been a Medicare demonstration project since 1985. There are three participating health plans: Kaiser Permanente Senior Advantage II; SCAN Health Plan; and Elderplan. Eligibility requirements are the same as M+C, though beneficiaries under age 65 and those who need long-term nursing home care are excluded. Under S/HMO I, participating health plans receive an adjusted M+C capitation. These payments are 15 to 20 percent higher than the amounts they would receive under the standard M+C capitation. Approximately five percent of members are targeted for special chronic care services.

CMS' [then HCFA] first evaluation of S/HMO I found that although S/HMO I successfully offered long-term care services, it

did not develop a well-coordinated system of care with acute, chronic, and long-term medical benefits. The principal problem was that S/HMO projects did not establish successful working relationships between physicians and case managers. Evaluators found such relationships necessary for the development of a well-coordinated system of care.

The S/HMO II demonstration, which became operational in 1996, was designed to improve the services, financing methods, and benefit design of S/HMO I. However, only one health plan, Health Plan of Nevada, a mixed staff- and IPA-model health plan, participates in S/HMO II. (Some claim this is because of a requirement to develop management information systems to facilitate patient assessments and promote information flow (Berenson, 2002); others claim that it is because of the risk adjustment method employed.) The risk-adjusted capitation is five percent higher than what would be received under the standard M+C capitation. S/HMO II also attempts to encourage formal involvement of geriatricians in the care planning process. Unlike S/HMO I, S/HMO II continues enrollment for those who need custodial-level nursing home care, though the plan is not at risk for such care. The single S/HMO II site enrolls over 35,000 members, approximately 20 percent of whom receive some level of care coordination or monitoring.

A provision in the Balanced Budget Act of 1997 required the Secretary of HHS to submit a plan for the integration of the S/HMO demonstrations as an option under the M+C program. In response, a comprehensive analysis of the two S/HMO models was conducted and a report was submitted to Congress. The report recommends phasing

out the S/HMO payment methodologies beginning in 2004 and converting the sites to standard M+C plans in 2007. HHS based its recommendation on the following:

- 1) there is no consistent evidence that the S/HMOs improve beneficiary outcomes,
- 2) the S/HMOs are paid more than M+C plans despite comparable case mix, and
- 3) the innovative S/HMO II design has been implemented in just one site, indicating little interest in that delivery model (Personal correspondence with CMS staff). Nevertheless, a 2002 case study analysis commissioned by CMS concluded that care coordination, geriatric services, communications, and support infrastructure development of S/HMO II has been extensive. Because of the difficulties integrating medical and social care, the technical assistance contractors believe that it took several years before key benefits could be adequately developed and linkages created (DHHS, 2002).

B. CARE COORDINATION

The care coordination programs described here, Kaiser Permanente's heart failure program and the CMS' case management demonstration, are attempts to better manage the care of high-cost beneficiaries, most of whom have chronic conditions. The Kaiser Permanente model shows how a large group-model plan can organize resources to target chronic conditions. The CMS case management demonstration illustrates the difficulties of coordinating care through the use of staff who are independent of the beneficiaries' physician.

Kaiser Permanente, Northern California Heart Failure Program

Kaiser Permanente's Northern California region is organized as a group-model HMO

with all Kaiser patients cared for by staff physicians. In the early 1990s, it initiated a number of chronic care programs to enhance quality and reduce costs. Its heart failure program is designed to improve medical management, quality of life, and functional health status for its members with heart failure. Kaiser's primary care division is responsible for this initiative.

The program features the use of interdisciplinary care teams. Providers are guided by evidence-based guidelines, scripts, and assessment tools to assess and manage clinical, behavioral and social issues and functional impairments. Protocols are used to help manage medications. The program uses reminder systems, patient care monitoring, and motivational interviewing to encourage involvement by patients.

Two years of data, 1998–2000, show that quality indicators are improving and patient satisfaction is relatively high and is continuing to increase. Kaiser's major constraint, however, is the cost of maintaining the program. Funding for 2000 was \$3 million, including the salaries of 37 dedicated full-time employees. Though Kaiser hoped that improved outcomes and reduced hospitalizations would pay for the cost of the program, this has not yet been realized.

Medicare Case Management Demonstrations for High-Cost Medicare Beneficiaries

From 1993 to 1995, three demonstration projects were implemented to identify groups of original Medicare beneficiaries at risk of needing high-cost care and to design the specific features of a case management intervention to reduce these costs. The projects were

conducted by: 1) a government business holding company of a large insurer, 2) a Peer Review Organization, and 3) a tertiary care teaching hospital. All three projects had basic case management activities in common (assessment, service coordination, condition-specific self-care education, and emotional support to clients and informal caregivers), though they differed in their level of in-person client contact, the degree to which case management activities were structured, use of nurses and social workers, and emphasis on education and service coordination. CMS (then HCFA) reimbursed the project sites for related expenses but did not provide reimbursement for case management services or financial incentives for reduced utilization.

Under contract to CMS, Mathematica Policy Research's evaluation of the projects found that none of them improved self-care or health, or reduced Medicare spending. According to project evaluators, the primary reasons for lack of impacts were: 1) physicians were not involved in the interventions, 2) projects did not have sufficiently focused interventions and goals, 3) projects lacked staff with sufficient case management experience and specific clinical knowledge to generate the desired reductions in hospital use, and 4) the projects had no financial incentive to reduce Medicare spending. The demonstration's evaluators state, however, that case management might be cost-effective if it included greater involvement of physicians, is more well-defined and goal-oriented, and incorporates financial incentives to generate Medicare savings (Schore, et al., 1999).

C. SYSTEM AND PAYMENT REDESIGN

The first program described here, the Breakthrough Series Best Practice Collaborative

Approach, involves a redesign of health care organizations' systems. The second program is Medicare's ESRD program, which is unique in its reimbursement structure. Original Medicare provides a capitated payment for the renal physicians' services and a bundled payment to the dialysis facilities for each dialysis visit. Under its M+C ESRD demonstration, a capitated payment is made to M+C plans for provision of comprehensive health care services for ESRD beneficiaries.

Chronic Care Breakthrough Series Best Practice Collaborative Approach

The Chronic Care Breakthrough Series, developed by the Institute for Healthcare Improvement (IHI), is being used to improve chronic illness care in a variety of organizations and across multiple chronic illnesses. Participants include managed care organizations, academic health center practice organizations, hospitals, and Health and Human Services' Health Resources and Services Administration (HRSA)-supported community health systems. The participating organizations assign a team to attend "collaborative learning sessions." During these sessions they use the Chronic Care Model to design and test system changes to improve the care of a single chronic condition (e.g., diabetes or asthma). The Chronic Care Model is a guide to improving the management of chronic conditions within primary care. It aims to facilitate comprehensive system change through:

- delivery system design (coordinated care, care-teams, and telephone and email consultations);
- decision support (evidence-based guidelines, assessment tools, medication order

entry systems, computerized diagnosis, and management assistance);

- clinical information systems (recall and reminders, disease registries, and provider profiles);
- self-management support (individual or group training and follow-up and educational materials);
- community linkages (coordination of medical and social services);
- organizational support (CMS to support providers and/or insurers' care delivery and MCO or group practice to support individual providers' care delivery).

The model does not offer a quick and easy fix; it is a multidimensional solution to a complex problem. None of the organizations have achieved full implementation of the Chronic Care Model, but all have made important strides toward that goal.

The Breakthrough Series has involved 104 health care organizations in year-long quality improvement programs. Participating organizations include a variety of health plan types that pay their providers on a fee-for-service basis. CMS is supporting this model through its Quality Improvement Organizations (QIOs) as part of its QI Intervention Strategies Collaborative.

Initial evidence demonstrates that the Chronic Care Model can improve chronic care and in some cases reduce health care costs. Using diabetes care programs as an example, a review of research evidence of programs that implemented the Chronic Care Model through multifaceted interventions found that most (32 of 39 studies) improved process and outcome measures for

diabetes. Another review of the research found that whether or not the program realized cost savings depends on the specific chronic condition targeted (improvements in the care of congestive heart failure, asthma, and diabetes were shown to have the capacity to reduce expenditures). Whether or not the cost savings translate to a business advantage depends on the type of organization instituting chronic care improvement and the mode of reimbursement. Though the cost savings in congestive heart failure, asthma, and diabetes care result from lower hospital and emergency room utilization, a hospital or health care system reimbursed by capitation can save money for the organization. On the other hand, a hospital or health care system that is reimbursed per diem or fee-for-service may lose revenue (Bodenheimer, et al., 2002).

End-Stage Renal Disease

In 1972, Congress enacted legislation to provide eligibility to individuals with ESRD. This is the only group of individuals to be eligible for Medicare based on a clinical condition. The high cost of care for ESRD beneficiaries has prompted innovations in both original Medicare and M+C. Savings to original Medicare are limited, however, by beneficiaries' high rates of comorbid conditions (see Table 1 on page 5). Capitation that includes the full range of beneficiaries' care (including comorbidities), on the other hand, appears to have the opportunity to improve quality of care.

ESRD Under Original Medicare

All ESRD beneficiaries require either dialysis or kidney transplant to sustain life—care that is very expensive. As a means of containing costs and better managing care, Medicare pays renal physicians a monthly capitation for

the direction of renal care (an amount about twice the payment for physician supervision of one inpatient dialysis session). It also pays dialysis facilities a predetermined payment for each dialysis treatment they furnish (up to 3 per week). This prospective payment is intended to cover all operating and capital costs for dialysis, including services, tests, drugs (erythropoietin is covered by Medicare but is not included in the prospective payment), and supplies routinely required for dialysis treatment.

The capitated amount is paid to renal physicians to manage dialysis care accounts for only a small part (approximately 20%) of all physician care received by ESRD patients. There were cost efficiencies in the early years of its implementation, but in recent years, most physician charges for dialysis patients are for services other than renal care. Thus, ESRD capitation payments have not been successful at controlling a patient's total expenditures. In part, this is due to the changing demographics of the ESRD population. Since 1978, the average age of Medicare's ESRD population has increased and a much higher percentage of persons with diabetes as the cause of renal failure are enrolled. Such ESRD patients have higher morbidity and mortality rates and higher average per capita expenditures (\$54,094 for those with diabetes; \$40,452 for those without) (Eggers, 2000).

Poor outcomes in the early 1990s prompted several quality improvement efforts. Such efforts included the development of performance measures by CMS, development of clinical practice guidelines by the renal community, and provision of facility-specific information to patients by CMS (posted on its Dialysis Facility Compare website).

Medicare+Choice ESRD Demonstration

In 1984, as part of TEFRA, Medicare began providing a capitated payment to HMOs that enrolled aged and disabled Medicare beneficiaries with ESRD. Though beneficiaries with ESRD were prohibited from enrolling in HMOs, they were allowed to remain in their HMO if they developed ESRD after enrollment. Medicare paid 95 percent of the statewide average per capita original Medicare ESRD costs, unadjusted for patient characteristics or treatment modality. Capitation provided opportunities for savings over fee-for-service expenditures by reducing inpatient utilization (nearly 40 percent of the costs for original Medicare ESRD patients were for inpatient care.) In 1993, Congress passed legislation requiring a S/HMO demonstration for ESRD beneficiaries. This demonstration tested whether: it is feasible to have year-round open enrollment of ESRD beneficiaries in an HMO; integrated acute and chronic care services and case management for ESRD beneficiaries improves health outcomes; capitation rates reflecting ESRD patients' treatment increases the probability of kidney transplant; and whether additional coverage benefits are cost-effective. Participating M+C plans were paid 100 percent of original Medicare ESRD expenditures, adjusted for age, original cause of ESRD, and type of therapy (e.g., dialysis, transplant, etc.)

Preliminary evaluation findings suggest that dropping the barrier to ESRD enrollment results in the same kind of adverse selection found in non-ESRD enrollment in M+C, with healthier ESRD beneficiaries choosing to enroll. Those who enroll say they do so to save out-of-pocket costs and gain extra benefits, and are influenced by their physicians in terms of whether or not to make this choice. Preliminary findings also indicate that

demonstration enrollees, like ESRD beneficiaries in the evaluation's comparison groups, scored high on tests of patient satisfaction with care. Their scores on quality of life measures were significantly better than those in the comparison group and improved significantly in the year following enrollment (DHHS, 2002b).

The 3-year period of mandated demo operations concluded in January 2001. One of the three participating M+C plans continued under a renewed demonstration waiver. BIPA of 2000 mandated risk-adjusted M+C ESRD capitation rates. In January 2002, CMS introduced M+C ESRD capitation payments that were adjusted for age and sex. CMS is currently developing a more comprehensive risk adjustment methodology that is scheduled to be implemented in 2004. This methodology is expected to also incorporate diabetic status and other comorbid conditions.

D. LESSONS FROM PAST INITIATIVES

Most of these initiatives found that chronic care requires specialized training and the coordination of providers. PACE and Kaiser Permanente's heart failure program, for example, showed that well-integrated care teams improve patient care. Conversely, the S/HMOs and the case management demonstrations showed that a lack of coordination between the care manager and physician is detrimental to chronic care efforts. Evaluation of the case management demonstration also found that nurse case managers and social workers with insufficient training in case management and clinical care were not effective as case managers. Evaluations have not shown, however, what type of training and participation of which provider type is needed to ensure their effectiveness.

These initiatives also show that financial incentives that align with program goals may be helpful. For example, CMS did not provide the case management demonstration sites with financial incentives for improving care or for reducing utilization. The capitated initiatives (PACE, Kaiser Permanente's heart failure program, and the M+C ESRD demonstration), provided that the capitation payment is sufficient, have built-in incentive to manage high-cost utilization. Nevertheless, there is concern that capitation will influence providers to withhold needed care or enroll healthier beneficiaries (as shown in the S/HMOs and the M+C ESRD demonstration.)

The above initiatives require the ability to track patients, diagnoses, and utilization. As most chronic care programs focus on beneficiaries with serious or high-cost conditions, information systems that help identify beneficiaries who will benefit most are crucial to program success. A major reason for the lack of impact of the case coordination demonstration was that the project participants could not effectively choose beneficiaries who were most appropriate for the program (instead, they depended largely on physician referrals). Once beneficiaries are selected, tracking patient utilization is necessary, as all of the programs described above are dependent on reducing high-cost utilization (e.g., inpatient costs) so that they can provide other services crucial to beneficiaries' care. Some utilize more rudimentary systems to track utilization (which is easier to do with a small number of beneficiaries); others (such as some Breakthrough Series Best Practice Collaborative participants) incorporate more advanced computerized information systems.

Experience also shows that sustained improvement requires comprehensive system change (e.g., community linkages, self-management support, delivery system design, decision support, and clinical information systems). PACE and Kaiser Permanente's heart failure program are successful largely because they encompass broad organizational change. Major changes to the care system, however, may be difficult to accomplish. As in the case of the S/HMO I, for example, they were unable to develop an integrated acute, chronic, and long-term care system. Efforts more limited in scope (such as assigning a nurse or social worker to manage beneficiaries' care) may be less likely to be successful and to sustain any improvements over time than those that encompass comprehensive system change.

Lastly, it may not be possible to vastly improve systems of care on a budget-neutral basis. As with Kaiser Permanente's heart failure program, large scale and comprehensive efforts may significantly improve the quality of care, though the short-run savings due to reduced inpatient and other high-cost utilization may not be as large as the cost of the improved care system. As Kaiser Permanente found, the additional staff needed to improve patient monitoring, provide coordinated care, address behavioral, social and functional issues, and provide self-management education, as well as the start-up costs for redesigning care systems and re-training providers, cost more than the savings earned by decreasing unnecessary high-cost utilization. Nonetheless, quality of care and patient satisfaction increased as a result of its new system of care.

Chapter 5: Conclusions and Recommendations

The study panel's recommendations include its long-term vision for Medicare and six short- to mid-term recommendations. The panel considered its original principles as it formed its recommendations. (Those principles are: focus on beneficiaries' needs and preferences; reimbursement to support recommended models of care delivery; and promote efficiency. (See page 12.)) It found that it is relatively easy to articulate Medicare's barriers to chronic care, but far more difficult to propose solutions.

One barrier to finding solutions is the absence of evidence to support many changes that seem, on their face, compelling. This led the panel to modify one of its initial principles: reliance on evidence-based change. Evidence to support policy making in health care is in its infancy. In many cases, the data to conclusively support recommendations that the panel views as important are simply not available. The panel also recognizes that collecting conclusive evidence may take a considerable amount of time. Thus, it has used what evidence is available to compose its recommendations and supplemented this with its health care and policymaking knowledge and experience.

In principle, the panel believes that its recommendations should help beneficiaries maintain function and quality of life. Incorporation of function and quality of life into Medicare is hampered by the ability to define and measure them. Nevertheless, progress in their definition and measurement has been made. Information on function based on some variant of the ADLs and IADLs is now

routinely collected for all patients receiving nursing home care, home health care, and rehabilitation. The International Classification of Function, Disability and Health (ICF), an indicator of functional loss and barriers to access to care, was recently released (2001) by the World Health Organization and may in the future be useful to Medicare. Systematically collecting quality of life information is more difficult and the systems to do so are more rudimentary, though work in this area is progressing.

A. AVENUES TO CHANGE

Medicare policies that support or constrain chronic care are established through myriad processes: law (also known as statute), regulations, and a host of sub-regulatory mechanisms, including national coverage decisions, contractor policy manuals, local medical review policies, program memoranda, operational policy letters, and program issuances.

Only Congress has the power to establish or change a law. Regulations are usually needed to implement laws. CMS must issue regulations in accordance with the Administrative Procedures Act (APA). The APA requires federal agencies to give the public notice of proposed actions, with opportunity to comment. When making sub-regulatory changes, CMS and its contractors are generally required to adhere to the intent of the law or regulation. Thus, CMS could not issue a policy that contravenes existing law or regulation.

If a change in law or regulation is not needed, sub-regulatory avenues may be used to

change policy. For example, to stipulate whether a service is covered, CMS may issue a national coverage decision, or Medicare contractors may issue a local medical review policy. However, relatively few national coverage decisions are issued and the process is lengthy. (In 2001, ten national coverage decisions were issued, with an average time from submission to issuance of 383 days.) Instead, most coverage policies are made by Medicare contractors (intermediaries and carriers) through local medical review policies. CMS can guide contractor policies and decisionmaking through program memoranda, operational policy letters, and contractor manuals.

The panel's recommendations address changes across the spectrum of Medicare policy sources.

B. LONG-TERM VISION

NASI's Chronic Care study panel proposes a long-term vision for Medicare. In the panel's vision, Medicare would provide beneficiaries with access to needed services and financial protection from health care costs that pose barriers to needed care. This would involve adding coverage for chronic care services not presently included in Medicare's benefit package, including function and quality of life-related services. Changes to the benefit package would be designed to meet the needs of beneficiaries. Medicare would also set reasonable limits for beneficiaries' health-related out-of-pocket expenditures.

The panel's vision entails a dramatic shift to include a chronic care focus in Medicare. Evidence-based guidelines would be available for all chronic conditions (and for multiple chronic conditions) and providers' practices would be based on these guidelines. Concern

for function and quality of life would be integrated into the care system. There would be a seamless continuum across acute, chronic, long-term and end-of-life care. All providers would be required to use computerized information systems. These systems would support sharing of electronic medical records among providers, medication order checks, and patient-specific protocols, all of which would vastly improve the quality of care, particularly given the high percentage of chronically ill beneficiaries with multiple providers.

As the largest health care purchaser in the country, Medicare would actively work to improve the quality of chronic care. It would surpass the quality standards set by the broader health care system. Quality of care would be measured and reported to the public. Medicare would make additional payments to providers who offer high quality care. Measures of quality of care would be sensitive to the unique conditions, issues, and diversity of concerns of beneficiaries with chronic conditions.

Reimbursement methods would cease to be an obstacle to chronic care services. Instead such methods would align incentives, adjust for risk factors, and provide the flexibility necessary for quality chronic care delivery. Variations on prepayment and salaries would be tested to foster a team-based approach to care, emails and telephone contacts with beneficiaries, an emphasis on prevention and self-management education, and incorporation of family members into the care process. Most providers would be affiliated with a provider network organization, a health plan, or an integrated delivery system that would provide them organizational support for chronic care (for computer systems, health education classes, etc.)

The study panel also envisions that the recommendations of the IOM’s *Crossing the Quality Chasm* report are adopted. Though the IOM’s recommendations encompass the broad U.S. health care system (non-Medicare and Medicare), as stated earlier, major improvements to Medicare beneficiaries’ care systems will require improvements in the broad health care system. Medicare should take the lead in chronic care system improvements.

C. SHORT- TO MID-TERM RECOMMENDATIONS

The following are the panel’s short- to mid-term recommendations, some of which could be implemented immediately; others may take five to ten years, though work on each of them should begin immediately. Some will have considerably more impact than others; some will cost the Medicare program more to implement than others; and some will be more difficult to gain political support than others. Nevertheless, the panel believes that each of its proposed recommendations are important for improving the health and financial security of beneficiaries with chronic conditions.

Changes to Medicare statutes will facilitate enactment of these recommendations. Statutes that emphasize its acute-care bias would be revised—including those that base coverage on the acute care term, “spell of illness.” The obsolete statute that prohibits Medicare from “exercising any control over the practice of medicine or the manner in which medical services are provided” would be repealed so that CMS would have greater authority to improve quality. As stated in Recommendation 2, the statute that prohibits services that are “not medically necessary,” and exclude “personal comfort

items...eye examinations...hearing aids...custodial care,” would be rewritten.

Appropriate implementation of these recommendations requires that CMS be given additional administrative resources. Even without any additional responsibilities in its portfolio, CMS’ present administrative resources are insufficient. Despite a dramatic increase in its responsibilities over the past decade, CMS program management appropriations have increased only 26 percent and the number of full-time employees 12 percent (King, et al., 2002). In an open letter to Congress and the Executive more than three years ago, experts and advocates warned of an impending management crisis that threatened the agency. The panel believes that policymakers must provide CMS with adequate administrative and management resources so that it can operate effectively, as well as implement changes to improve the chronic care provided to its beneficiaries.

Recommendation 1: Provide beneficiaries with financial protection from chronic conditions.

In accordance with Medicare’s original goal to provide beneficiaries with financial security, and the study panel’s principle to focus on beneficiaries’ needs and preferences, the panel recommends that services vital to chronic care be covered, and that beneficiaries’ out-of-pocket health care expenditures for covered services be limited. This would reduce an excessive financial burden on beneficiaries with chronic conditions. It will also help ensure that beneficiaries seek and have access to appropriate care.

- **Limit cost-sharing requirements by adding an annual cap on out-of-pocket expenditures for covered services.** An annual limit is needed to

protect beneficiaries with chronic conditions from high out-of-pocket costs.

- **Cover services necessary for beneficiaries' chronic care needs.** Such services not presently covered by Medicare are addressed in Recommendation 2.

**Recommendation 2:
Support the continuum of care beyond those services presently covered by Medicare.**

Medicare statute prohibits payment for services that "...are not reasonable and necessary for the diagnosis or treatment of illness or injury or to improve the functioning of a malformed body member" (1862(a)). The panel recommends changing this statute to: "...are not reasonable and necessary for the prevention, diagnosis, treatment of illness or injury, or to improve, maintain, or slow the decline of function." This change would explicitly allow for coverage of preventive and rehabilitative services that provide opportunities for beneficiaries to function to the best of their ability.

- **Address gaps in Medicare's benefit structure.** Two significant gaps are prescription drugs and preventive health services.
 - *Prescription drugs.* The panel views a prescription drug benefit as the single most important addition for management of chronic conditions. Such coverage should be meaningful and consistent with the need to limit beneficiaries' cost-sharing. To best support chronic care, prescription drugs should be added to the Medicare benefit package. The panel recommends that drugs be an integral part of Medicare so that their coordination with medical care will be enhanced and so that all beneficiaries

receive the benefit. Coverage for medication management should be included in the drug benefit, and it should offer beneficiary education, compliance monitoring, error checks, and facilitate coordination of pharmacists and physicians.

- *Preventive health services.* Health promotion and disease prevention services that assist beneficiaries in maximizing health status, functional independence, and quality of life, should be included in the benefit package. The statutory exclusion for preventive benefits should be repealed, and Congress should rewrite the statute to include preventive benefits. The decision about which preventive health services to add should be based on the recommendations of the U.S. Preventive Services Task Force (USPSTF). The statute should be revised so that the USPSTF's recommendations are reviewed and approved through the Medicare coverage process.
- **Strive to include services related to function and health-related quality of life.** Medicare should help beneficiaries maintain or restore function and quality of life.
 - *Relax the "homebound" requirement for home care.* Though the panel commends CMS for its July 2002 carrier manual changes (i.e., its provision of more examples of when occasional absences from the home are acceptable, its statement that a person's homebound determination should be made over a period of time, and for adding ALS and other neurodegenerative disabilities to the list of those conditions that may indicate a patient cannot leave home), the panel recommends that CMS and Congress go further. For example, it

could expand the homebound requirement to any individual who meets the current homebound definition; or any individual who could not leave the home without the provision of Medicare home care services, and without such services would be confined to the home.

Such terminology would not restrict a beneficiary to home, nor would it provide for home health services to those who are able to receive care regularly at outpatient facilities. It would move Medicare further along the long-term care continuum, though beneficiaries who require home health aide services to leave home, but who do not need skilled services, would still be excluded.

- ***Cover durable medical equipment (DME) with the specific intent of maintaining or restoring function.*** The requirement that DME be used primarily in the home should be eliminated because it prevents beneficiaries from being as independent as possible. The panel recognizes, however, that elimination of the “primarily in the home” clause will lead to other coverage issues. CMS should interpret DME coverage policies to maximize beneficiaries’ independence in a way that is reasonable.
- ***Provide for assistive devices that compensate for sensory or neurological deficits.*** Eyeglasses and hearing aid benefits, for example, which are now specifically excluded by statute (though generally one pair of eyeglasses following cataract surgery is covered), should be covered. The panel believes that vision and hearing aids for those with sensory deficits are as important as wheelchairs for beneficiaries with mobility limitations.

- ***Support rehabilitation as a tool to improve, maintain, or slow the decline of function.*** The panel recommends that CMS and its carriers adopt policies for Part B outpatient services comparable to current Part A regulations for home health and nursing facility services. (The Part A Manual states that the restoration potential of a patient should not be a deciding factor in determining whether therapeutic services are reasonable and necessary; the Part B manual states that rehabilitation coverage, with the possible exception of the design of and instructions for a maintenance program, be discontinued when a beneficiary reaches his/her full rehabilitation potential.)

Because the panel believes that contractors many times limit coverage, particularly for rehabilitation services, CMS should increase its oversight of carriers. It should review and analyze local medical review policies proposed by contractors, as well as the comments and testimony submitted by providers, beneficiaries and the general public, prior to implementation. CMS should require contractors to identify the research, practice guidelines, or community standards on which the local medical review policy is based.

- **Involve families.** Family care is essential to the quality of care for beneficiaries with chronic conditions. Medicare’s policies should provide information and education about choices of health plans, providers, and paperwork requirements not only to beneficiaries, but also to family members and caregivers. Medicare should also extend coverage for patient education to practitioners other than physicians and provide for an

explicit patient-family education benefit. Providers should be adequately compensated for their time spent on family consultations. Evaluation & Management coding should be modified to recognize this. Research and demonstrations should explore other payment options, including a specific payment for family consultations.

**Recommendation 3:
Promote new models of care.**

As the IOM's Quality of Care panel stated, "Incremental changes in policy are not sufficient to significantly improve quality of care. Instead, a new system of care must be developed and implemented" (2001). Medicare should play a leading role in the development of a new care system.

■ **Foster delivery system change.**

- *Encourage improved practice organization and care delivery.* A comprehensive approach is needed, as individual interventions will not result in substantial improvements in chronic care. An example of such an approach is the Chronic Care Model (described on page 43), which supports system change through delivery system redesign, decision support, clinical information systems, and self-management support, among others. This model promotes management of chronic conditions within a primary care-based setting and coordinates with specialists as necessary. Such an approach is most appropriate for those with multiple chronic conditions.
- *Support geriatric assessment and management.* Many Medicare beneficiaries would benefit from an assessment that aids in the diagnosis of functional ability, physical health,

cognitive and mental health, and the socioenvironmental situation. CMS should evaluate how to define standards for geriatric assessment and management, ensure that there is sufficient evidence of its effectiveness, and then establish reimbursement codes for this service. It should also determine if such services are most appropriate for a subset of beneficiaries.

- *Integrate services for those dually eligible for Medicare and Medicaid.* Systems of care for dual eligibles should be better integrated, as there is a disconnect between the services that Medicare covers (e.g., medical care) and those that Medicaid covers (e.g., community-based care). Integration will depend, in part, on better integration of funding, as well as the integration of CMS' Medicare and Medicaid divisions.

■ **Increase providers' knowledge of chronic and geriatric care.**

- *Use Graduate Medical Education funding to support chronic care training.* The panel recommends that academic medical centers receiving GME funding be required to demonstrate that some portion of their DGME funds is being used to train residents and students in the management of chronic conditions. As an initial measure, these academic medical centers should report the percentage of funds spent for training in outpatient facilities, nursing facilities, and home care. CMS should assess these data and then pursue additional collection of data and/or policies to promote outpatient and community-based training for residents.

The panel recognizes the role that Medicare GME funds play in sustain-

ing the missions of academic medical centers, but also believes that GME funds should encourage training to meet the needs of beneficiaries.

Therefore, it recommends that Medicare continue its development and implementation of a GME payment adjustment to promote patient care in outpatient and other care settings. Medicare should also attempt to influence the number of geriatricians by increasing payments to those academic medical centers that train geriatricians in larger numbers.

- *Support geriatric training for all physicians and train more academic geriatricians.* Because of the severe shortage of physicians trained in geriatrics, Medicare should ensure that all physicians, including both primary care and specialists (with the exception of pediatricians), receive basic education and training in geriatrics during their residencies. This will require an increased number of academic geriatricians. (In 1999, only 0.4 percent of all residencies were in geriatrics.) GME funds currently support a one-year geriatrics fellowship, though they previously supported a two-year fellowship. The panel recommends that Medicare pay for a second year of geriatric fellowship training because a two-year fellowship is the accepted standard for those who pursue an academic career in geriatric research or teaching.
- **Payment should support new models of care.**
 - *Risk-adjust Evaluation and Management (E&M) codes.* As per the panel's guiding principle that reimbursement should support recommended models of care delivery, the panel believes that the care delivery system described in this report

should be supported by risk-adjusted E&M codes. Though E&M codes are controversial and actively under discussion, the present coding system does not allow for the extended length of time a provider needs to offer quality care to those with chronic conditions. By more appropriately reimbursing providers for the additional time spent with these patients, quality of care should increase.

Add-on payments for beneficiaries with specified chronic conditions and/or multiple chronic conditions are one approach to risk adjustment that should be considered. An add-on payment would compensate providers of beneficiaries with serious chronic conditions through longer visits, additional care, and coordination with other providers. (Payment to providers of beneficiaries who do not meet the criteria would not be affected.) The add-on payment would be paid for all E&M services provided to beneficiaries who meet specified criteria. For example, CMS could establish criteria that include a subset or cluster of those with chronic conditions associated with higher costs, higher morbidity, higher rates of complications, and visits to a large number of providers (Berenson, 2002). CMS should begin by assigning researchers to select appropriate disease clusters and then adjust its payment systems to allow beneficiaries to be "tagged." Once the incremental payment is tested for a small subset of beneficiaries, it can be incorporated directly into the Medicare program.

- *Improve models for risk-adjusting prepaid arrangements.* Such arrangements are crucial to beneficiaries with chronic conditions. The

panel believes that its implementation should be expedited and that adjustments be improved to account for chronic conditions.

- *Test alternative payment models within original Medicare.* The study panel supports consideration of bundling and prospective payment for some services within original Medicare, particularly for primary care services. It believes that, in theory, such payment models help bypass many of the constraints of fee-for-service Medicare and offer flexibility and incentives to support well-coordinated care systems.

Though the panel does not have a specific plan to recommend, it encourages CMS to design and test a variety of payment models for different subpopulations. For example, PACE reimbursement methodology could be applied to other chronic condition or dual-eligible populations. Other potential payment models are the use of partial capitation reimbursement to physicians and/or physician groups under original Medicare and full capitation to physician groups under original Medicare.

**Recommendation 4:
Strengthen CMS' role as a purchaser of care.**

In principle, the panel supports the use of extra payments to providers who provide high quality chronic care, though it recognizes implementation and political complexities. Until systems to assess quality of care become more advanced, CMS should work to enhance quality of care reporting and implement demonstrations such as the Medicare Partnerships for Quality Services Demonstration (formerly called the Centers of Excellence Demonstration) for select

chronic conditions. As per the panel's principle of efficiency, such initiatives will help CMS ensure that the federal government and beneficiaries receive the best possible care for the dollars spent.

- **Measure and report on the quality of chronic care.** To the extent technically possible, Medicare should monitor the quality of chronic care provided by individual providers, physician groups, and health plans and make this information available to beneficiaries. Quality of care reporting requirements similar to those now required by M+C plans and nursing facilities should eventually be required of other providers. CMS should support the addition of more chronic care measures (including multiple chronic condition measures) because many of the quality measures assess care for acute illness. When feasible, measurement should attempt to take into account beneficiaries' preferences for care. As quality measurements improve, information on individual providers and group practices should be made available to the public. CMS' oversight in the provision of such information is a step towards acting as a purchaser of quality care.
- **Designate Medicare Partnerships for Quality Services demonstration (formerly called Centers for Excellence) for select chronic conditions.** Though the Partnerships for Quality Services demonstration has targeted acute conditions (including congestive heart failure and hip and knee replacements), this model could also be applied to single and multiple chronic conditions.

**Recommendation 5:
Support enhanced information systems.**

Medicare should support implementation of information systems that track beneficiaries across multiple providers and care settings. Enhanced information systems will support seamless care for beneficiaries, reduce medical errors, and make a wealth of population-based information available to providers and CMS. They also offer the opportunity to collect and standardize health and functional assessment data.

- **Implement electronic information systems.** CMS should support the replacement of handwritten medical records with longitudinal electronic medical records. Electronic records should include all information from beneficiaries' multiple providers, including reports from the primary care provider, specialists, hospitals, rehabilitation services, as well as a medical and social history, lab results, and drug allergies. Information systems should also proactively facilitate care. Systems should prompt providers about medical protocol (e.g., a physician of a diabetic could be reminded to do an eye or foot exam) and alert clinicians and pharmacists of a prescription error. They should be capable of analyzing sub-populations by chronic condition, age, geographic area, racial and ethnic group, etc. Such information would help CMS assess beneficiaries' quality of care, highlight potential areas for improvement in care, and provide evidence of which practices optimize quality of care.

The panel believes Medicare should play an influential role in the creation of an information infrastructure system for

medical records. (It should be acknowledged that Medicare led the health care system in its creation of the DRG system and electronic billing.) At issue is who should pay these costs, as a major obstacle to its implementation is the cost to providers for choosing, installing, and maintaining such systems. Though private insurers, and providers should all be expected to contribute to its costs, Medicare should pay its fair share. This could be in the form of supporting a pilot program in one state or area, grants to public hospitals, an add-on to DRG payments, or bonus payments to providers who implement such systems.

Because it may be many years before electronic medical records will be installed in the majority of provider practices (particularly smaller practices), CMS should also support the dissemination of flexible, patient-centered registries as an interim measure. Such registries are a list of all patients with a condition. Registries provide practices and practitioners with reminders, feedback, and care planning tools, as well as the systematic collection of clinical data essential for quality monitoring.

Though they need not be computerized, very simple computer systems can produce, hold, and make use of registries. Registries are a highly effective information system enhancement until the time that affordable, effective electronic medical records are relevant to small practices.

- **Promote the collection and standardization of health and functional assessment data.** Because CMS has mandated separate measures and infor-

mation systems for different provider settings (e.g., MDS, OASIS, IRF-PAI), beneficiaries' health, function, and quality of life cannot be tracked across care settings. BIPA required CMS to design standard instruments such that common elements may be readily comparable and are statistically compatible. It also required that CMS submit a report on the development of such instruments by 2005. Though a considerable amount of work has been done by CMS, other agencies, and the provider community, CMS is delaying implementation because of lack of financial resources. Congress should allocate the necessary funds to implement the development of these instruments, beginning with post-acute care settings. These common systems should then be expanded to other care settings.

**Recommendation 6:
Implement and support funding for research and demonstration projects.**

Information about what initiatives would (or would not) improve quality of chronic care and control chronic care expenditures will help guide the Medicare program.

- **Sponsor a wide variety of chronic care research and demonstration projects and readily incorporate successful elements into the Medicare program.** Research should be specific to the Medicare population. The Medicare population differs from the rest of the population because more of its beneficiaries are aged and disabled and more have chronic illnesses and functional and cognitive limitations.

The panel suggests that research and demonstrations be used as prototype development and findings used to expedite implementation of prototype models. Projects should aim to identify and substantiate solutions to problems. Once solutions are demonstrated, they should be incorporated into Medicare.

Along with the projects mentioned earlier in this report, the panel believes that further research and demonstration should:

- demonstrate whether it would be worthwhile for specific subpopulations (e.g., those with five or more chronic conditions or three or more ADLs) to be provided with alternative models of care management services;
- expand its present disease management projects to address multiple and serious chronic conditions;
- test alternative physician payment systems to accommodate non-visit based payments (e.g., emails and telephone calls);
- research options to promote family participation in care, including payment for family consultations;
- continue research on risk adjustment.

- **Redefine budget neutrality for the purpose of approving proposed demonstrations.** Change or provide greater flexibility to OMB's test of budget neutrality (which requires that individual Medicare and Medicaid program costs, as well as combined Medicare and Medicaid program costs, not exceed the projected spending in the absence of the demonstration.) Flexibility could be enhanced by increasing the number of years of the demonstrations or by allow-

ing additional federal cost categories to be included in the calculation. The study panel also believes that the concept of budget neutrality does not allow for the testing of new policies that may increase expenditures but are worthwhile because they improve quality of care.

- **Increase CMS' budget for research and demonstrations to improve chronic care.** The FY 2002 budget for CMS-wide research and demonstration programs is \$55 million.¹⁸ A significantly expanded research and demonstration program to investigate chronic conditions (those recommended in this document, as well as others), however, would require considerably more funding. The study panel suggests that one-half of one percent of the Medicare Part A Trust Fund (\$1.25 billion) be allocated to research and demonstrations.

D. PRIORITY AND LOW-COST POLICIES

The panel has recommended a number of ways to ensure beneficiaries' financial security and improve the quality of care for beneficiaries with chronic conditions. At issue is the cost to implement these recommendations. While the panel acknowledges that implementation of most of these recommendations will require additional significant spending, it believes that implementation of some or all of its recommendations would result in better care for beneficiaries and should be seriously considered. A recent report of the NASI study panel on Medicare's long-term

financing addressed ways to pay for increased costs. It concluded that additional Medicare revenues to serve future beneficiaries would be necessary but manageable (Gluck and Moon, 2000).

The panel offers policymakers broad guidelines for a variety of ways—large and small—to improve Medicare's care for beneficiaries with chronic conditions. It recognizes that it is unlikely that all of its recommendations will be implemented, especially in the short-run. It leaves it up to Congress to decide for which recommendations to appropriate funding, how to finance them, and a timeframe for their implementation. Nevertheless, it believes it is important to begin to make changes to improve care for beneficiaries.

To help policymakers prioritize which policies to support, the panel has listed the top recommendations that it believes would have the largest impact on chronic care. It also recommends the three low-cost recommendations that it believes would have substantial impact if enacted.

Along with a prescription drug benefit, the panel's top priority recommendations are:

- limit cost-sharing requirements by adding an annual cap for out-of-pocket expenditures;
- support new models of care by risk-adjusting Evaluation and Management (E&M) codes;
- implement information systems that track beneficiaries across multiple providers and care settings.

¹⁸ CMS' research budget includes research, demonstrations, and evaluations for the Medicare, Medicaid, and the State Children's Health Insurance Program.

The three low-cost recommendations that the panel believes would significantly improve the quality of chronic care to beneficiaries are:

- use Graduate Medical Education (GME) funding to support chronic care training;
- test alternative payment models;
- measure and report on the quality of chronic care.

The panel believes it is important to recognize the broader gains for society that can come from an improved Medicare program. Those gains include improved health status,

better quality of life, reduced financial risk, and greater peace of mind for Medicare beneficiaries and their families who now cope with the gaps in Medicare protection for people with chronic conditions.

The panel believes that Medicare's chronic care system and benefit structure is in crucial need of improvement. It hopes this report will help policymakers, providers, and beneficiaries better understand the many options to improve Medicare for people with chronic conditions and the need to adopt such changes.

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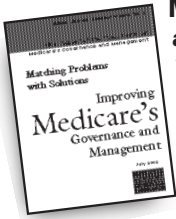
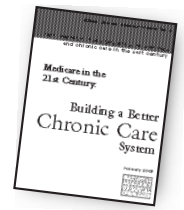
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This report, originally printed in the spring of 1993, provides a historical reflection on the early days of a program enacted in 1965 to provide health care coverage to 19 million elderly Americans. This second edition was released by the study panel on Medicare Management and Governance as part of the Academy's Restructuring Medicare for the Long Term Project. The report provides useful insights into the intentions of Medicare's founders and an historical benchmark against which to gauge the program's evolution over the last three-and-a-half decades.



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This report describes options for financing Medicare beneficiaries' health care under several possible approaches for changing the program's structure and benefits. It is the final report of a nonpartisan study panel convened by the National Academy of Social Insurance. The 12 members of the study panel represented a broad diversity of philosophical perspectives, disciplinary training, and professional experience.

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