

REPORT TO THE CONGRESS:

**Selected
Medicare Issues**

MEDPAC Medicare
Payment Advisory
Commission

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Anne B. Jackson, M.A., R.N., is a member of the National Legislative Council of the American Association of Retired Persons and served as chairperson of the Health and Future Generations Committee. She also previously served on the Physician Payment Review Commission. A registered nurse for 45 years, she retired in 1989. Mrs. Jackson was a professor in the Department of Nursing at City University of New York and was medical supervisor, head nurse, and staff nurse for the Veterans Administration (now the Department of Veterans Affairs). She is a member of the Institute of Medicine's Roundtable on Research and Development of Drugs, **Biologics**, and Medical Devices. Mrs. Jackson received a bachelor's degree in education from Hunter College and a master's degree in nursing administration from Columbia University Teachers College.

Spencer Johnson is president of the Michigan Health and Hospital Association, which is the principal statewide advocate for hospitals, health systems, and other health care providers committed to improving community health status. Before assuming this position in early 1985, Mr. Johnson was executive vice president of the Hospital Association of New York State. Before that, he was involved in the development of federal health policy and legislation as associate director of the Domestic Council at the White House during the Ford Administration and as a professional staff member of the U.S. Senate and the House of Representatives. He has served on the Prospective Payment Assessment Commission and is a board member of both Blue Cross Blue Shield of Michigan and the MHA Insurance Company. Mr. Johnson holds a master's degree in public administration from Cornell University and a bachelor's degree in journalism from St. Bonaventure University.

Peter Kemper, Ph.D., is vice president of the Center for Studying Health System Change. He is principal investigator of the Center's Community Tracking Study, a major national study of change in the health care system and its effect on health care delivery, access, cost, and quality. Before that, he was director of the Division of Long-Term Care Studies at the Agency for Health Care Policy and Research, where he headed studies of nursing home and home health care. Dr. Kemper has published widely on long-term care of the elderly, including home care for those with chronic care needs, nursing home use, and financing of care. His current research is on the effects of various types of managed care on patients' access, service use, and perceived quality. Earlier in his career, he was director of the Madison Office of Mathematica Policy Research and an assistant professor at Swarthmore College. Dr. Kemper received a B.A. in mathematics from Oberlin College and a Ph.D. in economics from Yale University.

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Carol Raphael is president and chief executive officer of the Visiting Nurse Service (VNS) of New York, the largest voluntary home health care organization in the United States. Under Ms. Raphael's leadership, VNS created VNS Choice, a New York State Medicaid Managed Long-Term Care Program and the Medicare Community Nursing Organization. Ms. Raphael also developed the VNS Center for Home Care Policy and Research, which conducts policy-relevant research focusing on the management, cost, quality, and outcomes of home- and community-based services. Before joining VNS, Ms. Raphael worked for years at the New York City Human Resources Administration, leaving as executive deputy commissioner of the Income and Medical Assistance Administration. Ms. Raphael has served on several Robert Wood Johnson Foundation advisory committees and New York state panels, including the New York State Hospital Review and Planning Council.

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Executive summary



Executive summary

Since its creation, the Medicare program has protected millions of beneficiaries from poverty by helping to pay for acute medical services. It has improved access to care for the elderly and many disabled Americans and is, by many technical and political measures, among the key policy successes of this century. Still, as the health care market evolves in this country, and as beneficiaries grow older and their health care needs change, Medicare must also evolve. In enacting the Balanced Budget Act of 1997 (BBA), the Congress took important steps to begin this evolution and to help extend the program's solvency in the short run. As the Secretary of Health and Human Services implements policies under this legislation, the Medicare Payment Advisory Commission (MedPAC) will monitor how well the program serves beneficiaries. Does it protect them from financial risk, while providing for care of adequate quality? Does it help them choose between insurance options and ensure access to needed services? And does it meet the special needs of vulnerable beneficiaries? In this volume, MedPAC begins to address these questions and offers recommendations to the Congress and the Secretary for improving the Medicare program.

Beneficiaries' financial liability and Medicare's effectiveness in reducing personal spending

Medicare is by far the largest source of payment for beneficiaries' medical care services and a significant source of payment for beneficiaries with high medical costs. Although the program does a reasonably good job of reducing out-of-pocket spending on medical care, some beneficiaries still face high personal spending because of the program's cost-sharing requirements; its lack of an annual limit on out-of-pocket spending; and its poor coverage of some services, such as medical equipment and supplies. Beneficiaries in long-term care facilities, and those who are female or age 85 or older face the highest total risk, while low-income beneficiaries are most likely to spend large fractions of their income on medical services.

Influencing quality in traditional Medicare

In addition to monitoring beneficiaries' exposure to financial risk, policymakers need to look closely at Medicare's systems for ensuring health care quality for beneficiaries who obtain care under all types of health care financing and delivery arrangements. In Medicare, as in the private sector, the strategies, techniques, and activities for safeguarding and improving quality have evolved differently under indemnity insurance and managed care. Because of historical objectives, structural limitations, and legislative restrictions, fewer (and different) approaches are now used under traditional Medicare, as compared to the program's managed care option, known as Medicare+Choice.

MedPAC identified actions needed to promote consistency and innovation in Medicare's quality initiatives. The Secretary should define programwide goals for improving Medicare beneficiaries' care and ensure that systems for monitoring, safeguarding, and improving the quality of care are, to the extent possible, comparable under traditional Medicare and Medicare+Choice. She should also work with interested parties to promote the development and use of common, core sets of quality measures that represent the full spectrum of beneficiaries' health care.

Other steps would maximize opportunities for reaching quality improvement goals in traditional Medicare. The Secretary should ensure that Medicare's quality assurance and improvement systems are consistent with best practices used by private health plans and purchasers. The Congress should provide the Health Care Financing Administration

(HCFA) with demonstration authority to test various mechanisms—such as payment incentives, preferred provider designations, or reduced administrative oversight—for rewarding health care organizations and providers that exceed quality and performance goals. Finally, the Secretary should develop and disseminate consumer-oriented information on quality of care to help beneficiaries compare enrollment options and providers.

Addressing health care errors under Medicare

Minimizing preventable errors must be a critical part of any effort to safeguard the quality of health care in both traditional Medicare and Medicare+Choice. Errors contribute to unnecessary patient injuries and health system costs; however, the experience of other industries has shown that errors can be reduced by changing the focus from individuals to systems and processes and by creating an environment in which errors are seen as opportunities for learning rather than reasons for punishment.

MedPAC recommends that Medicare establish patient safety as a quality improvement priority and take steps to reduce errors in beneficiaries' care. In pursuing safety improvements, the Secretary should consider opportunities for minimizing preventable errors through coverage and payment policies, quality measurement initiatives, and quality improvement programs. She should also support and use ongoing public and private error-reduction initiatives, including those to promote incident reporting by providers, to analyze root causes and patterns in occurrence, and to disseminate information designed to prevent recurrence.

Information on errors in delivering health care must be collected and analyzed if providers are to learn from errors and take steps to prevent recurrence. However, as long as providers fear the information they disclose can be used against them in a punitive manner, reporting preventable errors is unlikely to become routine practice. The Congress should address this fear by enacting legislation to protect the confidentiality of individually identifiable information relating to errors in health care delivery when that information is reported for quality improvement purposes.

Additional work is needed to determine the most effective ways for Medicare to minimize health care errors. MedPAC therefore recommends that the Secretary work with providers and other interested parties to identify and promote effective and efficient processes, structures, and activities for reducing preventable errors. The Secretary should not establish requirements that specify maximum tolerance rates of errors in health care delivery under Medicare's conditions of participation for health care providers but should instead set progressive targets for improving patient safety through Medicare's quality improvement programs. Additionally, she should fund research to study the appropriate use of autopsy, a procedure that can aid in uncovering and learning from errors, and evaluate approaches for using information from autopsies in quality improvement and error-reduction initiatives.

Structuring informed beneficiary choice

Medicare beneficiaries have been a largely untapped resource for quality improvement in Medicare. Helping them make informed choices from the available alternatives would allow them to spend their health care dollars wisely. It would also supplement Medicare's efforts to improve quality. In the first year of the Medicare+Choice program, HCFA began to meet its congressionally mandated responsibilities to educate and inform Medicare beneficiaries about their insurance options. Although the first nationwide information campaign has yet to begin, early evidence suggests that the campaign faces many challenges, including beneficiaries' lack of familiarity with and poor understanding of core concepts, problems with beneficiaries' use of detailed

written materials, and confusion resulting from misinformation and the lack of coordination among information providers.

HCFA must modify its initiatives to address these challenges and to incorporate its growing understanding of beneficiaries' information needs and ways to address them. To help the agency do so, the Congress should give HCFA more flexibility to develop and disseminate appropriate consumer information materials, and it should fund HCFA's education initiatives directly and adequately through the appropriations process, rather than through assessing user fees on Medicare+Choice organizations.

To help make information more useful and accessible, the Secretary should develop and evaluate interactive tools that help beneficiaries process information and that give them a framework for understanding their choices. She should define and regularly update standard terms for describing Medicare coverage options, use these terms in informational materials, and promote use of the terms by Medicare+Choice organizations and others who provide beneficiaries with information on insurance options.

To assess whether beneficiaries' information needs are met, the Secretary should study enrollment patterns, paying particular attention to vulnerable groups. To protect beneficiaries-especially those who are frail or functionally illiterate-from misinformation, she should watch for aggressive marketing techniques or abuses.

Managed care for frail Medicare beneficiaries: payment methods and program standards

A separate issue facing the Secretary is how to establish special managed care programs-such as the Program of All-Inclusive Care for the Elderly and the Social Health Maintenance Organization and EverCare demonstrations-as choices under Medicare. Decisions about payment methods and program standards will determine the future viability of these programs and whether they compete fairly with other managed care programs. Considering payment and standards for these special programs also raises broader issues of meeting the needs of frail Medicare beneficiaries in Medicare+Choice.

Because the planned risk adjustment method for Medicare+Choice does not appear to predict adequately the cost of care for frail beneficiaries, the Secretary should delay applying it to programs that specialize in caring for this population until alternatives are developed that would pay for their care appropriately. In the long term, the Secretary should set capitation payments for frail beneficiaries based on their personal characteristics, as opposed to setting rates based on the type of plan. Until then, she should study factors affecting the costs of care for all Medicare beneficiaries to determine what changes are needed to improve risk adjustment for frail beneficiaries; she should identify data needed to support improvements in the Medicare+Choice risk adjustment system; and she should evaluate partial capitation-a method of blending capitation and fee-for-service payments-to pay for the care of frail beneficiaries in Medicare+Choice and specialized plans.

To protect vulnerable beneficiaries, Medicare should carefully consider program standards in both Medicare+Choice and special programs for the frail elderly. In her quality measurement and reporting requirements for Medicare+Choice plans, the Secretary should include special measures for evaluating and monitoring care for frail beneficiaries. When applying program standards developed for Medicare+Choice to special programs for frail beneficiaries, Medicare should carefully consider each standard and its relevance for beneficiaries who enroll in special programs. Performance measures for special programs should reflect the needs of frail beneficiaries and the special practices to care for them.

Access to home health services

Medicare pays for many frail beneficiaries to receive care at home, although advocates for beneficiaries and representatives of the home health industry contend that payment changes made under the Balanced Budget Act of 1997 have improperly restricted access to home health care. Preliminary data suggest that fewer Medicare beneficiaries receive home health care than in the recent past, that those using care receive fewer visits, and that the number of Medicare-certified home health agencies has decreased since the BBA was implemented. Some agencies report they no longer accept or are likely to discharge certain types of patients, and beneficiary representatives indicate that some beneficiaries have difficulty obtaining services to which they believe they are entitled under law. The degree to which these changes may be attributed to new payments enacted in the BBA is not clear, however. Concurrent policy changes, including antifraud initiatives and removing venipuncture as a qualifying service for home health benefits, and other factors in the home health market may also be important. Moreover, the lack of clinically based standards for home health use makes it impossible to assess whether these changes are appropriate or harmful.

To help ensure that beneficiaries have access to needed home health care, the Secretary should use criteria based on their clinical characteristics to monitor use of home health services. She should develop regulations, also based on clinical characteristics, that outline home health care coverage and eligibility, and establish a uniform process for ensuring that fiscal intermediaries have the training and ability to provide timely and accurate information about coverage and payment to home health agencies. Additionally, the Secretary should improve the Medicare appeals process for home health users and establish a mechanism for informing beneficiaries about their rights to appeal.

If the Congress is not confident that the Secretary can implement a prospective payment system for home health services by 2000, then it should explore the feasibility of establishing a budget-neutral process for agencies to exclude a small share of their patients from the BBA's aggregate per-beneficiary limits. This change would help ensure that vulnerable beneficiaries continue to have access to needed home health services.

Improving care at the end of **life** --

Another vulnerable population is the nearly 2 million Medicare beneficiaries who die each year. Too many of their physical, emotional, and other needs go unmet, although good care could minimize or eliminate this unnecessary suffering. Even hospices—which pioneered care for the dying—help only a small fraction of patients and are often used far later than they should be. MedPAC joins many others in finding the present situation unacceptable. Ensuring that beneficiaries receive humane, appropriate care at the end of their lives should be a priority for the Medicare program.

To help achieve this goal, the Secretary should make end-of-life care a national quality improvement priority for Medicare+Choice and traditional Medicare. She should promote advance care planning by practitioners and patients well before terminal health crises occur, support research on care at the end of life, sponsor projects to develop and test measures of the quality of end-of-life care for Medicare beneficiaries, and enlist quality improvement organizations (also known as peer review organizations) and Medicare+Choice plans to implement quality improvement programs for care at the end of life.

In addition, the Secretary should work with nongovernmental organizations as they educate the health care profession and the public about care at the end of life, and as they develop measures to accredit health care organizations and provide public accountability for the quality of end-of-life care.

Improving the quality of care for beneficiaries with end-stage renal disease

Medicare policies also affect the quality of care for beneficiaries with end-stage renal disease (ESRD). Although survival and some clinical outcomes have improved for ESRD patients over the past five years, policy changes to permit higher doses of dialysis and appropriate clinical use of nutritional supplements could further improvement. For this reason, MedPAC recommends that the Secretary of Health and Human Services improve the quality of dialysis care by developing clinical criteria that could be used to modify payments for dialysis, covering nutritional therapy for malnourished ESRD patients as a renal benefit, and considering the quality assessment and assurance efforts of renal organizations.

With respect to payment, MedPAC reiterates its recent recommendation calling for an increase in the composite rate. The payment rate for dialysis has not increased since 1991, and the Commission is concerned about how this may affect the quality of care for dialysis patients.

To improve dialysis adequacy, the Secretary should determine clinical criteria for dialysis patients to receive increased frequency or duration of dialysis. Then she should examine the feasibility of a multitiered composite rate that would allow different payments based on the frequency and duration of dialysis prescribed, as well as other factors related to adequacy of dialysis.

Medicare does not cover nutrition supplements to treat the malnutrition that is a frequent complication of end-stage renal disease. To address this lack of coverage, the Secretary should determine clinical criteria for ESRD patients to be eligible for oral, enteral, or parenteral nutritional supplements. Coverage for these supplements should then be provided to eligible ESRD patients as a renal benefit apart from the composite rate. ■



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Acronyms

AAA	Area Agency on Aging
AAPCC	adjusted average per capita cost
ADE	adverse drug event
ADLs	activities of daily living
AMA	American Medical Association
ASCP	American Society of Clinical Pathologists
BBA	Balanced Budget Act of 1997
CABG	coronary artery bypass graft
CAHPs	Consumer Assessment of Health Plans
CAP	College of American Pathologists
CDC	Centers for Disease Control and Prevention
CHF	congestive heart failure
COPS	conditions of participation
COPD	chronic obstructive pulmonary disease
CPI	consumer price index
CRS	Congressional Research Service
DCG	diagnostic cost group
DOQI	Dialysis Outcomes Quality Initiative
DME	durable medical equipment
DRGs	diagnosis related groups
EPEC	Education for Physicians on End-of-Life Care
ESRD	end-stage renal disease
FDA	Food and Drug Administration
FEHBP	Federal Employee Health Benefits Program
FFS	fee for service
FY	fiscal year
GAO	General Accounting Office
HCBS	home- and community-based services
HCCs	hierarchical coexisting conditions
HCFA	Health Care Financing Administration
HCPCS	HCFA Common Procedure Coding System
HEDIS	Health Plan Employer Data and Information Set
HHA	home health agency
HHS	Department of Health and Human Services
HMO	health maintenance organization
HOS	Health Outcomes Survey (formerly Health of Seniors)
HPSA	Health Professional Shortage Area

IADLs	instrumental activities of daily living
ICD-9-CM	International Classification of Diseases, Ninth Revision, Clinical Modification
ICF	intermediate care facility
IDPN	intradialytic parenteral nutrition
IOM	Institute of Medicine
IPN	intermittent parenteral nutrition
IPS	interim payment system
JCAHO	Joint Commission on Accreditation of Healthcare Organizations
LTC	long-term care
MCBS	Medicare Current Beneficiary Survey
MedPAC	Medicare Payment Advisory Commission
NCQA	National Committee for Quality Assurance
NF	nursing facility
NIDDK	National Institute of Diabetes and Digestive and Kidney Diseases
NIH	National Institutes of Health
NKF	National Kidney Foundation
NLEA	Nutrition Labeling and Education Act
NMEP	National Medicare Education Program
NPSF	National Patient Safety Foundation
OASIS	Outcomes and Assessment Information Set
OBRA	Omnibus Budget Reconciliation Act (OBRA-89, for example)
OIG	Office of Inspector General
PACE	Program of All-Inclusive Care for the Elderly
PHP	prepaid health plan
PIP	principal inpatient diagnosis
PIP-DCGs	principal inpatient diagnosis-diagnostic cost groups
PMCC	Performance Measurement Coordinating Council
PPRC	Physician Payment Review Commission
PPS	prospective payment system
PRO	peer review organization
PSDA	Patient Self-Determination Act
QIO	quality improvement organization
QISM	Quality Improvement System for Managed Care
QMB	Qualified Medicare Beneficiary
RFA	request for application
RPA	Renal Physicians Association
RUG-III	Resource Utilization Groups, Version III

SHIP State Health Insurance Assistance Program
S/HMO Social Health Maintenance Organization
SLMB Specified Low-Income Medicare Beneficiary
SNF skilled nursing facility
SUPPORT Study to Understand Prognoses and Preferences for Outcomes and
Risks of Treatment
USRDS United States Renal Data System
VA Department of Veterans Affairs



Terms

access

The ability to obtain needed health care services.

activities of daily living (**ADLs**)

Measures, used in an index or scale, of an individual's degree of independence in bathing, dressing, using the toilet, eating, transferring (moving from a bed to a chair), and moving across a small room. (See instrumental activities of daily living.)

adjusted average per capita cost (**AAPCC**)

A county-level estimate of the average cost Medicare would expect to incur for each beneficiary in the fee-for-service program. Adjustments are made so the AAPCC represents the level of spending that would occur if each county contained the same demographic mix of beneficiaries. Before enactment of the Balanced Budget Act of 1997, Medicare paid health plans 95 percent of the AAPCC, adjusted for the characteristics of the enrollees in each plan.

beneficiary

A person eligible to receive benefits under a health insurance program, such as Medicare.

capitation

A payment mechanism that pays a fixed amount per person per time period to cover services. Purchasers may use capitation to pay health plans, or plans may use it to pay providers. (See fee for service, Medicare risk contract, Medicare+Choice.)

case mix

The mix of patients treated within a particular institutional setting, such as a hospital or nursing home. Patient classification systems—such as diagnosis related groups and Resource Utilization Groups, Version III—can be used to measure hospital and nursing home case mix, respectively. (See case-mix index, diagnosis related groups and Resource Utilization Groups, Version III.)

case-mix index (CMI)

In hospitals, the average diagnosis related group (DRG) weight for all cases classified according to DRGs. The CMI is a measure of the expected relative costliness of patients' treatment in each hospital or group of hospitals. (See diagnosis related groups.)

coinsurance

A type of cost sharing in which beneficiaries and insurers share liability in a specified ratio for the established payment to a provider for a covered service. For example, Medicare beneficiaries pay coinsurance equal to 20 percent of the program's physician fee schedule amount for physicians' services. (See copayment, deductible.)

conditions of participation (COPS)

Requirements that health care facilities and organizations must meet to be eligible to receive Medicare payments.

copayment

A type of cost sharing in which beneficiaries pay a fixed dollar amount for a covered service. (See coinsurance, deductible.)

cost sharing

Payments that health insurance enrollees make for covered services. Examples of cost sharing include coinsurance, copayments, deductibles, and premiums.

deductible

A type of cost sharing in which beneficiaries must pay a specified amount for covered medical services before their insurer assumes liability for all or part of the cost of subsequent covered services. (See coinsurance, copayment.)

diagnosis related groups (**DRGs**)

A system for determining case mix, used by Medicare for payment in the prospective payment system (PPS) for inpatient hospital services and by some other payers. The DRG system classifies patients based on principal diagnosis, type of surgical procedure, presence or absence of significant comorbidities or complications, and other relevant criteria. DRGs are intended to categorize patients into groups that are clinically meaningful and homogeneous with respect to resource use. Medicare's PPS currently uses almost 500 mutually exclusive DRGs, each of which is assigned a relative weight that compares its cost to the average for all DRGs. (See case mix, prospective payment system.)

durable medical equipment (**DME**)

Medical equipment that has a long duration of usefulness. Durable medical equipment is covered under Medicare Part B and includes, but is not limited to, oxygen tents, hospital beds, and wheelchairs used in patients' homes.

fee for service (FFS)

A method of paying health care providers for individual medical services, rather than paying them salaries or capitated payments. (See capitation.)

health maintenance organization (HMO)

A type of managed care plan that acts as both insurer and provider of a comprehensive set of health care services to an enrolled population. Benefits are typically provided with limited copayments, and services are furnished through a system of affiliated providers. (See managed care.)

health plan

An organization that acts as insurer for an enrolled population. (See fee for service, managed care.)

Health Plan **Employer** Data and Information Set (HEDIS)

A set of standardized measures of health plan performance. HEDIS allows comparisons among plans on quality, access, and patient satisfaction; membership and use; financial information; and management. Employers, health maintenance organizations, and the National Committee for Quality Assurance developed HEDIS.

hierarchical coexisting conditions (**HCCs**)

A risk adjustment model that predicts health care resource use and is based on beneficiaries' diagnoses from all sites of health care. (See risk adjustment.)

home health care

Skilled nursing care, physical therapy, speech therapy, occupational therapy, medical social services, or home health aide services provided in Medicare beneficiaries' homes. The first 100 visits following an acute-care hospital stay or a skilled nursing facility stay are covered under Medicare Part A. Subsequent post-acute visits and those not preceded by a hospitalization or a stay in a skilled nursing facility are covered under Medicare Part B. There is no beneficiary cost sharing for home health services.

instrumental activities of daily living (**IADLs**)

Measures, used in an index or scale, of an individual's degree of independence in aspects of cognitive and social functioning, such as shopping, cooking, doing housework, managing money, and using the telephone. (See activities of daily living.)

International Classification of Diseases, Ninth Revision, Clinical Modification (**ICD-9-CM**)

A system for classifying and coding diagnoses and procedures. This system is used to facilitate the collection of uniform and comparable health information. (See diagnosis related groups.)

lifetime reserve days

If hospitalized more than 90 days for a single spell of illness, beneficiaries may draw upon a reserve of 60 days, which require a daily copayment (\$384 in 1999). Each lifetime reserve day used is nonrenewable.

long-term care

Services that support, treat, and physically rehabilitate people with functional limitations or chronic conditions who need ongoing health care or assistance with activities of daily living. (See activities of daily living.)

managed care

A system of health service payment and delivery arrangements in which a health plan attempts to control or coordinate the use of health care services by its enrolled members to contain spending, improve quality, or both. Arrangements often involve a defined delivery system of providers that have some form of contractual agreement with the plan. (See health maintenance organization, preferred provider organization.)

Medicare

A health insurance program for people over 65, those eligible for Social Security disability payments, and those who need kidney dialysis or kidney transplants. (See Medicare Part A, Medicare Part B, Medicare+Choice.)

Medicare+Choice

A program created by the Balanced Budget Act of 1997 to replace the system of Medicare risk and cost contracts. During an open season each year, beneficiaries have the choice of enrolling in a Medicare+Choice plan or remaining in traditional Medicare. Medicare+Choice plans include coordinated care plans (offered by health maintenance organizations, preferred-provider organizations, or provider-sponsored organizations), private fee-for-service plans, and high-deductible plans with medical savings accounts.

Medicare Physician Fee Schedule

The resource-based fee schedule Medicare uses to pay for physicians' services.

Medicare Part A

Also called hospital insurance. This part of the Medicare program covers the cost of hospital stays and related post-hospital services. Eligibility is normally based on prior payment of payroll taxes. Beneficiaries are responsible for an initial hospital deductible per spell of illness and for copayments for some services.

Medicare Part B

Also called supplementary medical insurance. This part of the Medicare program covers the cost of physicians' services, outpatient laboratory and X-ray tests, durable medical equipment, outpatient hospital care, and certain other services. This voluntary program requires payment of a monthly premium, which covers about 25 percent of program costs, with general revenues covering the rest. Beneficiaries are responsible for an annual deductible and for coinsurance payments for most covered services.

Medicare risk contract

A contract between Medicare and a health plan under which the plan receives monthly **capitated** payments to provide Medicare-covered services for enrollees and thereby assumes insurance risk for those enrollees. (See Medicare+Choice.)

medigap policy

A private insurance policy designed to complement Medicare coverage. All medigap policies sold after July 31, 1992, must provide one of ten uniform benefit packages, which range from covering most of Medicare's copayment and coinsurance requirements to covering all Medicare cost sharing plus some services not covered by Medicare.

noncash transfer

A transfer from government to individuals of specific goods or services rather than cash. Medicare is a **noncash** transfer of medical care.

nursing facility (NF)

An institution that provides skilled nursing care and rehabilitation services to injured, functionally disabled, or sick persons; or regularly provides **health**-related services to individuals who, because of their mental or physical condition, require care and services that can be made available to them only through institutional facilities. In the past, certification distinctions were made between a skilled nursing facility and an **intermediate** care facility (the latter was certified only to furnish less-intensive care to Medicaid recipients). The Omnibus Budget Reconciliation Act of 1987 eliminated that distinction by requiring all nursing facilities to meet skilled nursing facility certification requirements for Medicare purposes. (See skilled nursing facility.)

outliers

Cases that substantially differ from the rest of the population of cases. With regard to hospital payment, outliers are identified as cases with extremely high costs compared with the prospective payment rate in the diagnosis related group. Hospitals receive additional payments for these cases under the prospective payment system. (See prospective payment system.)

peer review organization (PRO)

A state-based organization, also known as a quality improvement organization, that undertakes Medicare quality improvement and peer review activities under contract to the Health Care Financing Administration (HCFA). Quality improvement organization is the term preferred by the organizations themselves, although peer review organization is the term used in legislation, regulations, and publications by HCFA.

preferred provider organization (PPO)

A managed care plan that contracts with networks or panels of providers to furnish services and be paid on a negotiated fee schedule. Enrollees are offered a financial incentive to use providers on the preferred list but may use non-network providers as well. (See managed care.)

premium

An amount paid periodically to purchase health insurance.

principal inpatient diagnosis-diagnostic cost group (PIP-DCGs)

A risk adjustment method that is the basis for the interim risk adjustment system for Medicare+Choice payment rates. Beneficiaries' relative health status is measured using the principal diagnoses of inpatient hospitalizations. The model is prospective, meaning that payments in a year are based on inpatient hospitalizations during the previous year.

private contracting

A physician payment option created by the Balanced Budget Act of 1997. Under private contracts, beneficiaries agree to pay full charges directly to physicians, and no bills are submitted to Medicare. Physicians who enter into these contracts cannot submit bills to Medicare for any patient for a period of two years.

prospective payment system (PPS)

A provider's payment is based on predetermined rates and is unaffected by its incurred costs or posted charges. Examples of prospective payment systems include the one Medicare uses to pay hospitals for inpatient care and the physician fee schedule.

Qualified Medicare Beneficiary (QMB)

This Medicaid program pays for Medicare premiums, deductibles and coinsurance for beneficiaries with incomes at or below the federal poverty level. Some beneficiaries may also qualify for full Medicaid benefits under state laws.

quality improvement organization (QIO)

A state-based organization, also known as a peer review organization, that undertakes Medicare quality improvement and peer review activities under contract to the Health Care Financing Administration (HCFA). Quality improvement organization is the term preferred by the organizations themselves, although peer review organization is the term used in legislation, regulations, and publications by HCFA.

Quality Improvement System for Managed Care (QISMC)

Health care quality measurement, reporting, and improvement requirements for health plans participating in Medicare+Choice.

Resource Utilization Groups, Version III (RUG-III)

A system for determining case mix in nursing facilities. The RUG-III system classifies patients based on functional status (as measured by an index of activities of daily living) and the number and types of services used. Each RUG has a nursing index or weight indicating the average level of resources needed to provide nursing services to patients in the group. Rehabilitation RUGs also have indexes indicating the average levels of resources required to furnish therapy services. (See case mix, activities of daily living.)

risk adjustment

The process used to adjust health plan payments to compensate for differences in expected spending on enrollees in different plans.

risk selection

Any situation in which health plans differ in the health risks associated with their enrollees because of enrollment choices made by the plans or the enrollees. Health plans' expected costs vary because of underlying differences in health and use of services in their enrolled populations.

risk sharing

A method of providing additional payment amounts for high-cost patients or to offset plan losses, for example, stop loss policies that provide additional payments once a spending threshold has been reached.

skilled nursing facility (SNF)

An institution that has a transfer agreement with at least one hospital, that provides primarily inpatient skilled nursing care and rehabilitative services, and that meets other specific certification requirements.

Specified Low-Income Medicare Beneficiary (SLMB)

This Medicaid program pays the Medicare Part B premium for Medicare beneficiaries with incomes between 100 and 120 percent of the Federal poverty level.

supplemental insurance

Health insurance held by Medicare beneficiaries that covers part or all of the program's cost-sharing requirements and some services not covered by traditional Medicare. Beneficiaries may obtain these policies as a retirement benefit from a former employer or by individual purchase. (See medigap policy.)

CHAPTER

1

**Beneficiaries' financial liability
and Medicare's effectiveness
in reducing personal spending**

Beneficiaries' financial liability and Medicare's effectiveness in reducing personal spending

The Medicare program reduces beneficiaries' out-of-pocket spending on medical care. It is by far the largest source of payment for beneficiaries' medical care services and a significant source of payment for beneficiaries with high medical care costs. However, Medicare cost sharing and the lack of coverage for some services cause some beneficiaries to have high out-of-pocket spending on medical care. The benefit structure for medical equipment and supplies and the lack of an annual limit on out-of-pocket spending are the most problematic factors in this issue. Furthermore, these policies lead some beneficiaries to face the difficult situation of persistently high personal spending.

In this chapter

- Medicare reduces beneficiary liability

- Medicare cost sharing and uncovered services
- Future research

Policymakers have been concerned about the impact on Medicare beneficiaries of high out-of-pocket spending for medical services. The primary motivations for creating the Medicare program were to reduce elderly Americans' exposure to financial hardships from health care spending and to improve their access to medical care (Long and Settle 1984). In this chapter, the Medicare Payment Advisory Commission (MedPAC) examines the problem of high out-of-pocket spending by beneficiaries and how effectively Medicare is reducing it.

As the largest source of payment for medical care—traditional Medicare pays about 62 percent of community-based beneficiaries' total spending on medical care—Medicare performs reasonably well in reducing personal (out-of-pocket) liability on medical care goods and services.¹ Most beneficiaries avoid spending extremely large percentages of their income on medical care: 68 percent of community-based beneficiaries spend less than 20 percent of their income on medical care and health insurance. Moreover, the program tends to pay a higher percentage of total spending on beneficiaries' use of medical care as their total spending increases.

However, cost-sharing provisions and uncovered services contribute to some beneficiaries' having high out-of-pocket costs for medical care and health insurance. For example, Medicare sets no annual limit on personal spending on services it covers, and there is no coverage for prescription medicines and long-term institutional care. For the beneficiaries who use the most medical care, medical equipment and supplies are often the largest source of personal spending, even though many are covered by Part B.

This chapter discusses in detail Medicare's payment for medical care services, how cost sharing and uncovered

services contribute to high personal spending on medical care and premiums by some beneficiaries, and how widespread persistently high personal

spending is among beneficiaries. It is intended to draw attention to these issues and identify areas where future research would be most beneficial.

Methods used for this analysis

We analyzed beneficiaries' financial liability in the context of two types of spending: total and personal. Total spending is the sum of the amounts paid by all sources of payment for all medical goods and services used by beneficiaries.

We divided total spending into six categories of payment sources: Medicare, out-of-pocket spending, supplemental insurance, managed care, Medicaid, and other. Medicare includes the total amount paid by traditional Medicare. Out of pocket is the portion of total spending that beneficiaries pay directly. It does not include payments beneficiaries made for Medicare Part A premiums; Medicare Part B premiums; managed care premiums; or premiums for private supplemental insurance. Supplemental insurance includes medical goods and services paid by private medigap or by other private health insurance. Managed care includes payments made by private and Medicare managed care plans. The vast majority of Medicare managed care plans are risk plans, but some are cost or health care prepayment plans. Private managed care plans generally serve a purpose similar to private supplemental insurance and often are obtained through former employers. Medicaid includes medical care payments made

by the Medicaid program. Other includes payments by the Veterans Administration; unspecified sources; other public sources, such as state-sponsored programs; and uncollected liabilities.

Personal spending is the sum of the out-of-pocket spending component of total spending and beneficiaries' spending on premiums for Medicare Part A and Part B, private supplemental insurance, and managed care coverage. Given this definition of personal spending, we recognize as a reasonable argument that the out-of-pocket component of total spending should be the same as the definition of personal spending. Under this reasoning, other adjustments would be necessary. The payments beneficiaries made for Part A and Part B premiums should be subtracted from payments made by Medicare, the Part A and Part B premiums paid by Medicaid should be moved from Medicare to Medicaid, the payments beneficiaries made for supplemental insurance premiums should be subtracted from the supplemental insurance category, the premiums beneficiaries paid for managed care should be subtracted from managed care, and the remaining payments made by Medicare managed care organizations should be moved to Medicare.^a

Continued on page 5

^a When we use these definitions of sources of payment, the percentage paid by Medicare of community-based beneficiaries' total spending decreases to 57 percent from the 62 percent reported earlier.

¹ Our estimate of 62 percent differs substantially from some other estimates of just over 50 percent (Office of Strategic Planning, HCFA 1998). The difference occurs because our percentage includes only the community-based beneficiaries who are defined as having spent no time in 1995 in long-term care institutions, such as nursing homes, but other analysts used beneficiaries in the community and beneficiaries in long-term care institutions. We chose to exclude institutionalized beneficiaries because they have extensive spending on institutional services, and Medicare is intended to cover only acute care services. However, the impact of institutional care expenses on institutionalized beneficiaries is so strong that we found it worthwhile to examine the institutionalized population separately.

Methods used for this analysis

Continued from page 4

However, when we discuss total spending, we intend to show the financial situation beneficiaries face when they receive care. For beneficiaries who have Part B and supplemental insurance coverage, the premiums already have been paid when they receive care, so the premiums do not affect their out-of-pocket burden at that point. However, we used the specified definition of personal spending (which includes premiums) because we want to show the burden beneficiaries have over time.

We used the Medicare Current Beneficiary Survey (MCBS) Cost and Use file for our analysis. The data are based on a continuous, multipurpose survey of a representative sample of the Medicare population. We looked at Medicare data from a single year (1995) and over several years (1992 through 1995). We used beneficiaries for whom MCBS has complete survey data for single-year analysis. We used a subset of the MCBS file to create a panel of beneficiaries for assessing the program over several years.

When we analyzed Medicare data for 1995, we divided the beneficiaries into two groups: those who were in the community throughout 1995 or until their death (community-based beneficiaries) and those who had spent any time in long-term care institutions (institutionalized beneficiaries).^b Excluding from the community-based population beneficiaries who spent only part of 1995 in long-term care institutions will cause personal spending for the community-based beneficiaries to be lower than if they are

included as part of the community, because they tend to be more costly than till-year community-based beneficiaries. However, we chose to include the part-year institutionalized as part of the institutionalized population and to analyze the institutionalized and community-based populations separately, because the institutionalized beneficiaries' personal spending is driven by institutional services that Medicare was not initially intended to cover.

To analyze Medicare data over several years, we used the annual MCBS Cost and Use files to create a panel that links information for beneficiaries who remained in the survey year to year. The sample includes information on beneficiary characteristics, Medicare eligibility, supplemental insurance coverage, and components of personal spending on medical care. Further, the sample includes beneficiaries who lived in the community and long-term care facilities, as well as beneficiaries who died during the period analyzed. The sample contains approximately 6,500 beneficiaries representative of those in the total MCBS Cost and Use files. We sorted this subset by level of personal spending and used it to assess the persistence of high personal spending.

Our analysis often uses mean values (averages) as descriptive statistics. All statistics have some degree of uncertainty in their precision, but in nearly all cases, we view the statistics we present as having high degrees of precision. However, in a few cases, the degree of precision has led us to view the statistics with some caution, and we have indicated these situations. ■

^b Long-term care institutions include nursing homes, retirement homes, mental health facilities, and other facilities. Skilled nursing facilities are not considered long-term care facilities. Some beneficiaries in mental health facilities actually are considered in the MCBS to be in the community. Whether such a beneficiary is in the community-based population or the institutionalized population depends on the length of time spent in the mental health facility.

Medicare reduces beneficiary liability

We found that Medicare reduces personal spending liability by providing:

- nearly universal coverage,
- the largest source of payment of medical care costs, and
- payments that are a larger percentage of total spending as total spending increases.

Medicare provides nearly universal coverage

Medicare reduces personal spending liability because it provides nearly universal coverage for the aged population. In 1997, 33.6 million elderly were covered under Medicare, representing nearly 98 percent of the population age 65 years or older (HCFA 1997, SSA 1997). The goal of this universal coverage is to reduce the financial burden of acute medical services on the elderly population.

Universal coverage is important for two reasons. First, it is difficult for the elderly to obtain private primary insurance coverage because they are a high-risk population that is less attractive to private insurers. In 1995, the aged accounted for 40 percent of all hospital stays and 49 percent of inpatient hospital days. Inpatient stays averaged nearly two days longer for the aged than for the nonaged population. The aged also averaged nearly twice the number of physician contacts (Administration on Aging 1998). This higher use makes the aged population less attractive to private insurance providers.

Second, even if this group were able to obtain private coverage, many would have difficulty affording it. Approximately 11 percent of the elderly population live in poverty, with another 6.4 percent having incomes between the poverty level and 125 percent of this

level.² Because the elderly are considered a higher-risk population, their private primary insurance premiums would tend to be prohibitively expensive to most low-income elderly beneficiaries.

Medicare is the largest source of payment

In addition to providing nearly universal coverage, Medicare was the largest source of payment for community-based beneficiaries in 1995. The 1995 MCBS indicates that traditional Medicare paid about 62 percent of the community-based population's total spending on medical care (see Figure 1-1). Out-of-pocket spending was the second largest source of payment, accounting for about 15 percent of the total, but it should be noted that this percentage was reduced substantially by widespread supplemental coverage.³

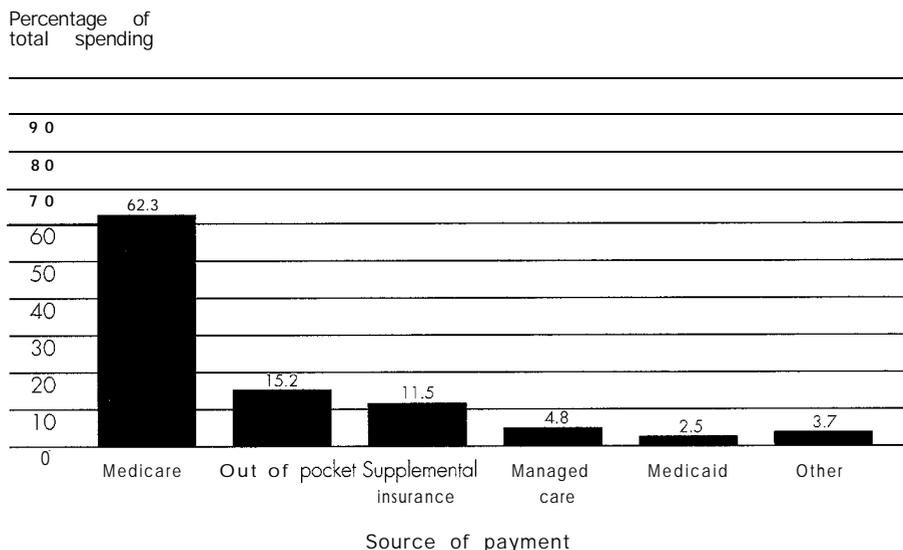
Medicare payments increase as beneficiaries' total spending on medical care increases

Traditional Medicare not only was the largest source of payment for community-based beneficiaries in 1995, but it also provided more assistance as beneficiaries' needs increased because it paid a growing fraction of total spending as this spending increased. The program paid 75.8 percent of total spending for beneficiaries in the top decile of total spending but only 11.6 percent for beneficiaries in the bottom decile (see Figure 1-2).

Traditional Medicare paid an increasing percentage as total spending increased because of the program's cost-sharing structure in 1995. Under Part A, Medicare required a \$716 deductible per benefit period for the first 60 days of inpatient hospital care and no other cost sharing until the 61st day. Therefore, as the number of hospital days a beneficiary had in a benefit period grew (up to 60), so did the fraction of hospital costs paid for by

FIGURE 1-1

Percentage of total spending by source of payment, 1995



Note: "Other" includes payments by the Veterans Administration, unspecified source, other public sources such as statesponsored programs, and uncollected liabilities. Analysis is based on community-based beneficiaries. Total spending is the sum of payments by all sources of payment for medical care goods and services.

Source: MedPAC analysis of the 1995 Medicare Current Beneficiary Survey, Cost and Use file.

Medicare's benefit structure

Medicare's Part A benefit covers hospital inpatient services. In 1999 (1995 values in parentheses when different), beneficiaries face an inpatient deductible of \$768 (\$716) for each benefit period, with a new benefit period starting when a beneficiary has been out of a hospital or skilled nursing facility for at least 60 days. After beneficiaries meet the deductible, Medicare pays 100 percent of hospital inpatient costs for up to 60 days. For the 61st through 90th days of an inpatient stay, Medicare requires daily coinsurance of \$192 (\$179). Beneficiaries hospitalized more than 90 days can use their 60 nonrenewable lifetime reserve days, which have daily coinsurance of \$384 (\$358).

Part A also covers home health and skilled nursing facility (SNF) services. Home health services and the first 20 SNF days

in a benefit period have no cost-sharing requirements, but daily coinsurance of \$96 (\$89.50) is required for days 21 through 100 in a SNF. Medicare does not cover more than 100 days in a benefit period for care in a skilled nursing facility.

Under Part B—which covers physicians' services, laboratory services, durable medical equipment, hospital outpatient services, and other medical services—beneficiaries must pay a \$45.50 monthly premium (\$46.10), a \$100 annual deductible, and 20 percent coinsurance.

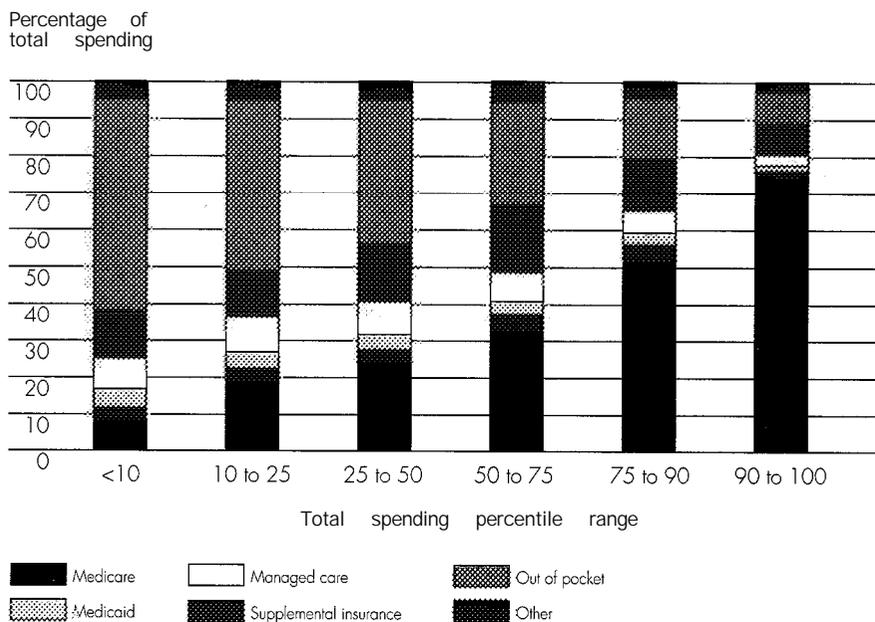
Medicare does not cover some products and services at all, most importantly prescription medicines (with some exceptions), services in long-term care institutions, and long-term home- and community-based care.

² Overall, children are more likely to live in poverty than the elderly, particularly children living with a female head of household.

³ The Figure 1-1 percentage for managed care organizations is based mainly on payments made by Medicare managed care organizations as reported in the MCBS, which likely understates the actual percentage. Another way to estimate the payments made by managed care organizations is to use adjusted average per capita cost (AAPCC) payments the Medicare system made to managed care plans. This alternative method would raise the managed care percentage in Figure 1-1 to 7.6 percent.

FIGURE 1-2

Percentage of total spending by source of payment by total spending percentile range, 1995



Note: "Other" includes payments by the Veterans Administration, unspecified sources, other public sources such as statesponsored programs, and uncollected liabilities. Analysis is based on community-based beneficiaries. Total spending is the sum of payments by all sources of payment for medical care goods and services.

Source: MedPAC analysis of the 1995 Medicare Current Beneficiary Survey, Cost and Use file

Medicare. Under Part B, beneficiaries paid a 20 percent coinsurance for most services after they paid the \$100 annual deductible for Part B covered services, so Medicare paid a higher fraction of Part B costs the more that beneficiaries' covered spending exceeded the deductible.

Medicare cost sharing and uncovered services

Despite the reduction in personal liability by Medicare, cost sharing and uncovered services appear to cause some beneficiaries to face high levels of personal spending and to spend substantial percentages of their income on medical care. In this section, we examine the cost sharing and uncovered services affecting personal spending, the extent of the problem of

persistent high personal spending, and the populations most affected. The most important cost-sharing policies and uncovered services are related to:

- the lack of an annual limit on personal spending,
- coverage for medical equipment and supplies used by beneficiaries, and
- the lack of coverage for prescription medicines.

The populations most affected are beneficiaries who:

- have high total spending.
- are in long-term care institutions.
- are age 85 or older.
- are female.

Medicare cost sharing and uncovered services contribute to high personal spending

The lack of an annual limit on personal spending seems to contribute to high personal spending by some community-based beneficiaries. In 1995, 5 percent of community-based beneficiaries spent more than \$4,675, and 1 percent spent more than \$8,805. The lack of an annual limit is even more a problem for community-based beneficiaries with only traditional Medicare coverage. Among those beneficiaries, 5 percent spent more than \$5,920, and 1 percent spent at least \$15,819. Traditional Medicare has many features of typical indemnity plans, such as fee-for-service coverage, deductibles, and coinsurance rates, but Medicare differs from most indemnity plans in that it does not have an annual limit on personal spending. If Medicare had an annual limit, very high personal spending would be less common.

The cost sharing and uncovered services also induce many beneficiaries to obtain private supplemental insurance, which results in a far-reaching increase in personal spending. Most community-based beneficiaries had some form of private supplemental insurance in 1995, and supplemental insurance premiums are, on average, the largest source of personal spending for community-based beneficiaries (a mean of \$575 in 1995), a finding consistent with other studies (AARP and Lewin 1997, Moon et al. 1996, PPRC 1997).

The coverage policies for medical equipment and supplies beneficiaries use also appear to contribute to high personal spending.⁴ Among community-based beneficiaries with high total spending, medical equipment and supplies—often covered under Part B—frequently

⁴ The medical equipment and supplies category includes eyeglasses, contact lenses, and hearing aids; orthopedic items such as canes, walkers, wheelchairs, and corrective shoes; diabetic supplies; oxygen supplies and equipment; kidney dialysis equipment; hospital beds; commodes; and disposable supplies such as disposable diapers and bandages.

account for the largest share of personal spending. Among community-based beneficiaries in the top decile of total medical care spending in 1995, mean personal spending on medical equipment and supplies was \$895 (we caution about the precision of this statistic), an amount much higher than the second largest source of personal spending in that group—supplemental insurance premiums (a mean of \$555) (see Figure 1-3).

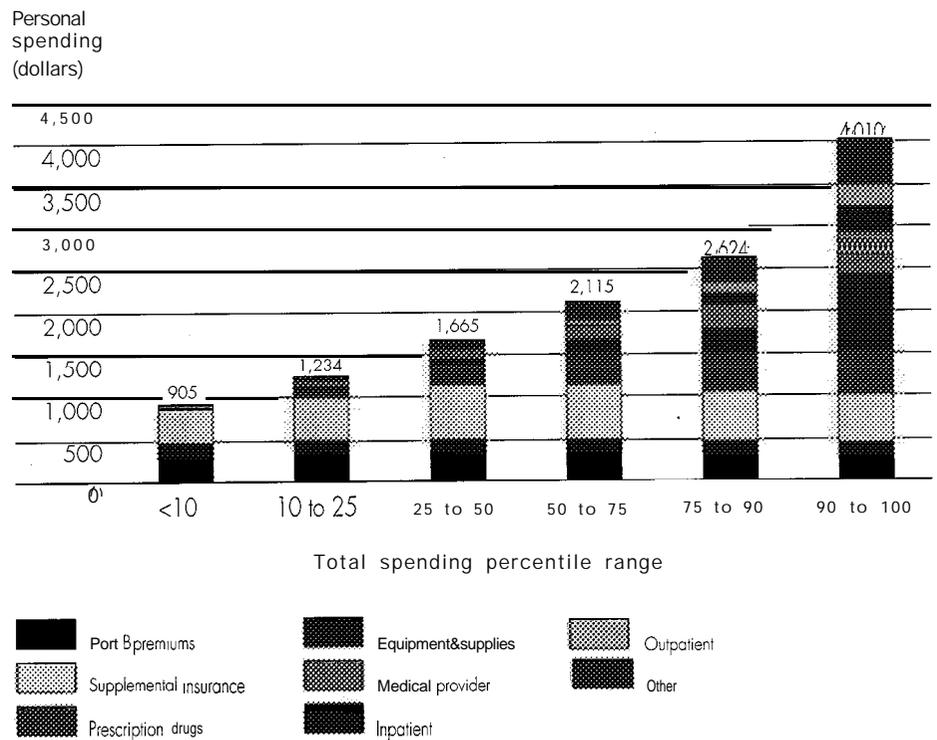
Part B covers a large portion of equipment and supplies, so high personal spending for medical equipment and supplies likely results from cost sharing requirements under Part B: a \$100 deductible, 20 percent coinsurance, and no annual limit on personal spending on Part B covered goods and services. However, use of equipment and supplies that Medicare does not cover, such as eyeglasses, also appears to be a factor, as community-based beneficiaries in the highest decile of total spending had substantial total expenditures on uncovered medical equipment and supplies (a mean of \$1,082).

Prescription medicines and long-term institutional care

Medicare was designed to reduce beneficiaries' exposure to financial hardship from acute health care spending. It was not intended to cover certain other goods and services such as prescription medicines and long-term institutional care. However, despite its intended purpose, Medicare often receives a negative evaluation for not covering such spending. Therefore, MedPAC believes an analysis of personal spending on prescription medicines and institutional services is beneficial and enlightening.

Personal spending on prescription medicines is a topic of contentious debate. Despite the lack of Medicare coverage, the MCBS indicates that mean personal spending on prescription medicines was not high for community-

FIGURE 1-3 Mean personal spending by total spending percentile range, 1995



Note: The medical provider category includes spending on physicians and other practitioners, diagnostic laboratory and radiology services, and medical and surgical services. The equipment and supplies category includes durable medical equipment and nondurable supplies. Personal spending includes beneficiaries' out-of-pocket spending on medical care, Medicare premiums, managed care premiums, and private insurance premiums. Analysis is based on the community-based population.

Source: MedPAC analysis of the 1995 Medicare Current Beneficiary Survey, Cost and Use file

based beneficiaries in 1995—it was about \$304 for the year. Mean personal spending also was not much higher for community-based beneficiaries with only Medicare coverage (\$344), but many members of this group may have forgone supplemental coverage because they were not high-level users of medical care.

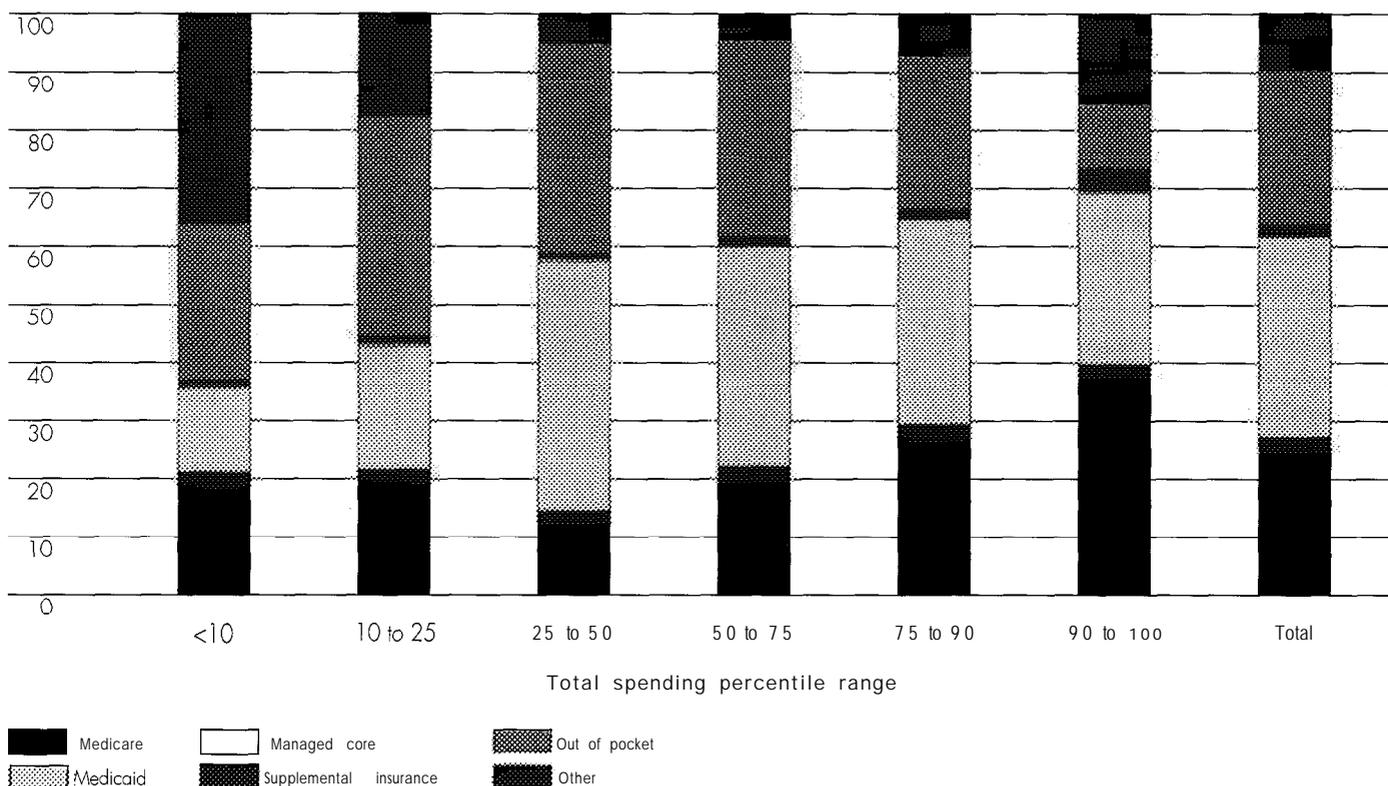
Although the MCBS indicates mean personal spending on prescription medicines was low in 1995, the effects of this uncovered service are far-reaching: Nearly 85 percent of community-based beneficiaries in 1995 paid some amount out of pocket for prescription medicines. Extreme values (the 99th percentile) of personal spending on prescription medicines also

were high—\$2,134. Furthermore, the MCBS data understate the effect of the lack of prescription medicine coverage because 65 percent of beneficiaries had (private or public) supplemental or managed care coverage that paid for part or all of the cost of prescription medicines (Davis et al. 1999), and the prescription medicine coverage increases premiums for the private coverage. Finally, the MCBS data on prescription drugs may further understate the situation because the data were collected from interviews with beneficiaries and could not be cross-referenced with Medicare claims data as was done with other categories, such as hospital inpatient services. It is likely that beneficiaries failed to inform survey

FIGURE 1-4

Percentage of total spending by source of payment by total spending percentile range, institutionalized population, 1995

Percentage of total spending



Note. "Other" includes payments by the Veterans Administration, unspecified sources, other public sources such as state-sponsored programs, and uncollected liabilities. Analysis is based on beneficiaries who spent time in institutions such as nursing homes, retirement homes, mental health facilities, and other long-term care facilities. Skilled nursing facilities are not considered long-term care. Total spending is the sum of payments by all sources of payment for medical care goods and services.

Source: MedPAC analysis of the 1995 Medicare Current Beneficiary Survey, Cost and Use file.

interviewers of all prescription medicines they purchased during the survey period.

Nevertheless, the low mean personal spending on prescription medicines contrasts sharply with much of the evidence in recent debate. We offer three caveats on this point, however. First, the debate may depend as much on the fact that most beneficiaries have personal spending on prescription medicines as on the magnitude of the personal spending. Second, the MCBS data are from 1995, and personal spending on prescription medicines may have increased since then

because of the introduction of costly new drugs and an increase in the use of drugs. In other words, the MCBS data may be too old to accurately represent out-of-pocket spending on prescription medicines in 1999. Finally, the current debate often depends on data that may not accurately represent spending by all Medicare beneficiaries. Nationally representative data are more reliable.

The lack of coverage for long-term institutional services has a different effect than the lack of coverage for prescription medicines. Although only a small fraction of the Medicare population uses

institutional services (7.7 percent in 1995), these uncovered services profoundly affect those who do. MCBS data indicate the lack of Medicare coverage for institutional care and the high cost of this care often result in high personal spending by beneficiaries who use institutional care, where personal spending is still defined as beneficiaries' out-of-pocket spending on all medical care services, including institutional care, and on Medicare and private supplemental insurance premiums. In 1995, mean personal spending by beneficiaries who used institutional care was \$10,675, with about 88 percent of

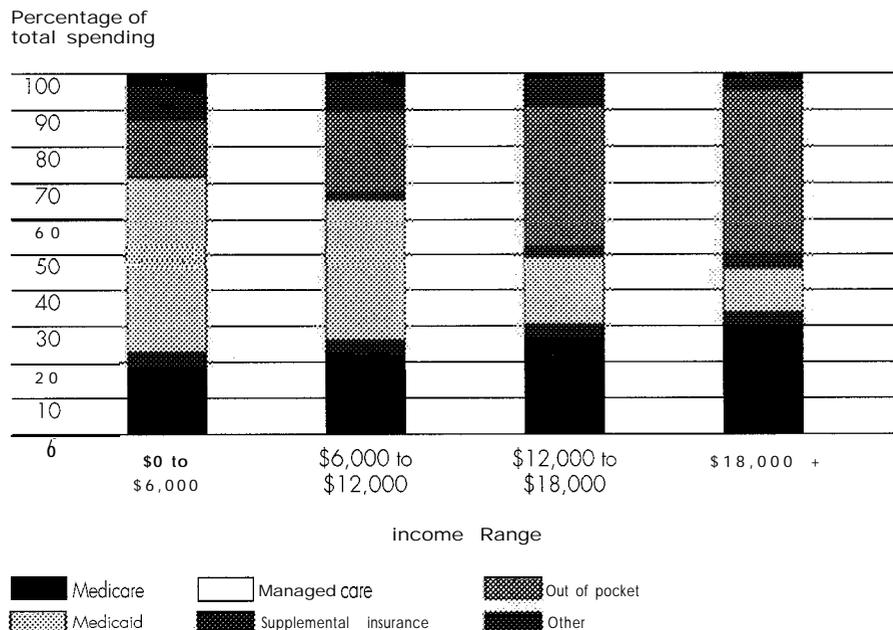
personal spending for these beneficiaries attributable to institutional services. This spending contrasts sharply with community-based beneficiaries, whose mean personal spending was \$2,015. Moreover, the difference between the highest-spending beneficiaries who use institutional care and the highest-spending community-based beneficiaries is even more pronounced. Among institutionalized beneficiaries in 1995, the people at the top decile of personal spending spent \$28,370, while the analogous community-based beneficiaries spent just \$3,607.

The lack of Medicare coverage for institutional services causes the institutionalized population to differ from the community-based population not only in terms of personal spending but also in the percentages of total spending by sources of payment. Medicare covers a relatively small share of total spending for institutionalized beneficiaries: 27.2 percent overall and 39.7 percent among institutionalized beneficiaries in the highest decile of total spending (see Figure 1-4). However, these beneficiaries' financial risk is not as high as the Medicare coverage percentages suggest because Medicaid helps alleviate the financial burden. In 1995, Medicaid was a substantial source of coverage for institutionalized beneficiaries—about 34.4 percent of total spending was paid by Medicaid (see Figure 1-4).⁵

Beneficiaries must meet income and asset requirements before they can receive benefits under Medicaid. Because many institutionalized beneficiaries do not meet eligibility requirements for the program, they must find other ways to pay for institutional services. Therefore, despite the high levels of Medicaid coverage, many Medicare beneficiaries using institutional services risk high personal liability.

By law, institutionalized residents are required to use their income from Social

FIGURE 1-5 Percentage of total spending by source of payment within income range, institutionalized population, 1995



Note: "Other" includes payments by the Veterans Administration, unspecified sources, other public sources such as statesponsored programs, and uncollected liabilities. Analysis is based on beneficiaries who spent time in institutions such as nursing homes, retirement homes, mental health facilities, and other long-term care facilities. Skilled nursing facilities are not considered long-term care. Total spending is the sum of payments by all sources of payment for medical care goods and services.

Source: MedPAC analysis of the 1995 Medicare Current Beneficiary Survey, Cost and Use file.

Security and pensions to offset the cost of their institutional expenses, so those with higher incomes will tend to pay more out of pocket before becoming Medicaid eligible. Therefore, it is not surprising that Medicaid pays more for low-income beneficiaries while high-income beneficiaries pay more out of pocket. In 1995, Medicaid paid 48.7 percent of total spending for institutionalized beneficiaries who had incomes below \$6,000, but just 12.1 percent for institutionalized beneficiaries who had incomes of \$18,000 or more (see Figure 1-5). Conversely, the same low-income beneficiaries paid about 15.4 percent of their total medical care spending out of pocket, while the beneficiaries with incomes of \$18,000 or

more paid 45.1 percent (see Figure 1-5). As a final point, the beneficiaries with incomes of \$18,000 or more had a much lower percentage of their total spending paid by Medicare, 33.7 percent, relative to all community-based beneficiaries, despite the fact that Medicaid provides relatively little assistance for the \$18,000-and-over institutionalized beneficiaries.

low-income beneficiaries are more likely to spend large percentages of income

Earlier, we showed that Medicare, in general, helps reduce beneficiaries' risk of financial hardship by reducing personal spending on medical care. This finding further relates to the fact that

⁵ By contrast, Medicaid paid only 2.5 percent of total spending for community-based beneficiaries

most community-based beneficiaries avoid paying extremely large percentages of their incomes on medical care and premiums (personal spending). For those beneficiaries, the median percentage of income spent on medical care and premiums was 13 percent in 1995 (see Table 1-1), and 68 percent of community-based beneficiaries spent no more than 20 percent of income. The median value of 13 percent is consistent with the median amount found in previous research (14.4 percent in CRS 1998).

However, Medicare cost sharing and uncovered services contribute to some beneficiaries' spending large percentages of their incomes on medical care and premiums. Not surprisingly, among community-based beneficiaries, lower-income beneficiaries are under greater financial strain from the burden of medical care spending than higher-income beneficiaries. For example, the median percentages of income spent on medical care and premiums for poor, near poor,

TABLE 1-2

Percentage of income spent on medical care and premiums by income category, 1995

Income category	At median of distribution	At top decile of distribution
Poor	18	97
Near poor	21	47
Low income	18	39
Middle income	11	24
High income	6	14

Note: Analysis is based on the community-based population. The numerator is out-of-pocket spending on medical care, Medicare premiums, managed care premiums, and private insurance premiums. For married beneficiaries, the Medicare Current Beneficiary Survey (MCBS) reports joint income with their spouses. Therefore, in this table we divide by two the reported MCBS income for married beneficiaries. Poor beneficiaries are below the poverty line; near poor are from 100 to 125 percent of poverty; low income are from 125 to 200 percent of poverty; middle income are from 200 to 400 percent of poverty; and high income are 400 percent of poverty and higher.

Source: MedPAC analysis of the 1995 MCBS Cost and Use file.

and low-income community-based beneficiaries (18 percent, 21 percent, and 18 percent, respectively) are much higher than the percentages for middle- and high-income groups, 11 percent and 6 percent, respectively (see Table 1-2). Furthermore, extreme values differ profoundly by income category. Among poor beneficiaries, those who spent the highest fraction of their income on medical care and premiums (beneficiaries in the top decile for this statistic) spent 97 percent of income, while analogous beneficiaries in the high-income group spent only 14 percent of their income on medical care and premiums (see Table 1-2).⁶

The fact that some poor beneficiaries spend extremely high percentages of income on medical care and premiums may appear inconsistent with the fact that Medicaid pays all of the cost sharing and some uncovered services for qualified poor beneficiaries. However, in 1995, only 46 percent of the poor, community-based beneficiaries received assistance from Medicaid. Furthermore, for some of those beneficiaries, Medicaid paid just the Part B premium and Medicare cost sharing (qualified Medicare beneficiaries), and for still others,

Medicaid paid just the Part B premium (specified low-income Medicare beneficiaries).

Beneficiary spending over time

Another concern is that beneficiaries face higher personal spending as they age. During 1992-1995, personal spending rose with average spending increasing for the entire elderly cohort from \$2,850 in 1992 to about \$3,150 in 1995 (in dollars not adjusted for inflation).

We can enhance our cross-sectional analysis of beneficiaries' personal spending by exploring the degree to which high personal spending persists from year to year. Persistence of high spending is important because one year of high personal spending may not present the hardship to beneficiaries that a pattern of persistently high personal spending would.

To evaluate the issue of persistence, we ask two questions. First, what happens to the beneficiaries' level of personal spending, given that they had high personal spending in the first period (1992) and second, among beneficiaries

TABLE 1-1

Distribution of the percentage of income spent on medical care and premiums, 1995

Distribution percentile	Share of income
10th	3%
25th	7
Median	13
75th	24
90th	40

Note: Analysis is based on the community-based population. The numerator is out-of-pocket spending on medical care, Medicare premiums, managed care premiums, and private insurance premiums. For married beneficiaries, the Medicare Current Beneficiary Survey (MCBS) reports joint income with their spouses. Therefore, in this table we divide by two the reported MCBS income for married beneficiaries.

Source: MedPAC analysis of the 1995 MCBS Cost and Use file.

6 It may seem impossible to spend 97 percent of income on medical care and premiums, but a likely explanation is that these beneficiaries used savings and other assets to pay for medical care.

with high personal spending in one year, what percentage of surviving beneficiaries are likely to have high personal spending in the following years?

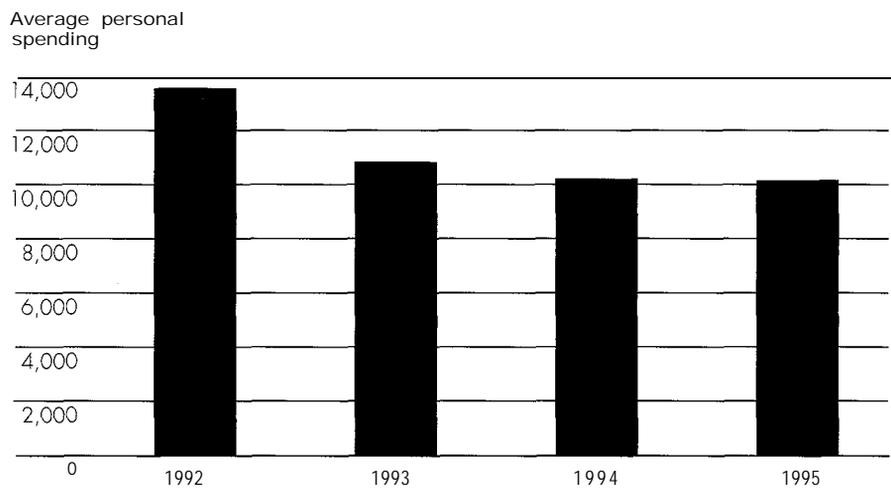
To answer the first question, we rank beneficiaries by their personal spending in 1992 and follow those individuals over time. This approach simultaneously captures two phenomena: the degree to which high personal spending in one year continues in subsequent years and the effects that aging and death have on spending over time. To determine the potential hardship of persistent high personal spending, we evaluate personal spending relative to a fixed threshold, 175 percent of the mean level of personal spending in 1992 for all beneficiaries in the cohort tile. The mean level of personal spending in 1992 was \$2,850, so 175 percent of that level was \$4,987.

Beneficiaries spending 175 percent of the mean represented approximately the 90th percentile of personal spending. Over time, mean personal spending for the highest 10 percent remained well above 175 percent of the 1992 mean (See Figure 1-6). Many of the beneficiaries in this group died or entered skilled nursing facilities from 1992 through 1995. Therefore, the considerably higher persistent personal spending for the highest 10 percent of beneficiaries demonstrates the high personal spending associated with the final year of life and the high personal spending that precedes entering a skilled nursing facility.

Not surprisingly, these beneficiaries tended to be somewhat older than the general Medicare population and predominantly women. The highest personal spending of beneficiaries above the 90th percentile was attributable to beneficiaries age 85 or older with spending about 12 percent higher than others above the 90th percentile. Also note the pattern of high spending is somewhat dampened over the period because of an increase in the number of beneficiaries who qualified for Medicaid

FIGURE 1-6

Average personal spending for beneficiaries in the 90th percentile of spending



Source: MedPAC analysis of 1992 through 1995 Medicare Current Beneficiary Survey, Cost and Use file

coverage. Overall, 27 percent of beneficiaries above the 90th percentile received Medicaid assistance in 1992, and this percentage increased to 46 percent by 1995.

To answer the second question, we evaluate persistence from a slightly different perspective. In this method, we eliminate from the cohort sample beneficiaries who died from 1992 through 1995. We rank beneficiaries by personal spending in each year (1992 through 1995) and determine the percentage who remain high spenders in subsequent years. This evaluation gives us the likelihood that beneficiaries will continue to have high personal spending in a subsequent year, given that they have high spending in the first year (1992). Furthermore, we can determine the percentage of beneficiaries who continue to have high personal spending over the entire period, relative to all surviving beneficiaries in this sample. To determine the potential hardship of persistent high spending, we evaluate personal spending relative to a fixed threshold. Each year, we define the threshold for high personal spending as two times the mean level of personal spending in

1992 for all beneficiaries in the sample. The mean level of personal spending in 1992 was \$1,616, so twice the mean level equals \$3,231. Two times the mean level of spending represents approximately the 90th percentile of personal spending.

In this case, we examined the proportion of surviving elderly beneficiaries who continued to have high personal spending above the threshold, \$3,231 (Figure 1-7). Of the beneficiaries above the 90th percentile in 1992, nearly 70 percent continued to have personal spending above the threshold one year later. By the fourth year, 56 percent continued to have personal spending above the threshold. Mean personal spending for the highest 10 percent of beneficiaries was about \$8,000 in each year, and though exceeding the threshold does not affect a large number of beneficiaries (in 1995, 56 percent of the top 10 percent), the persistence of high personal spending may represent a serious problem for these beneficiaries.

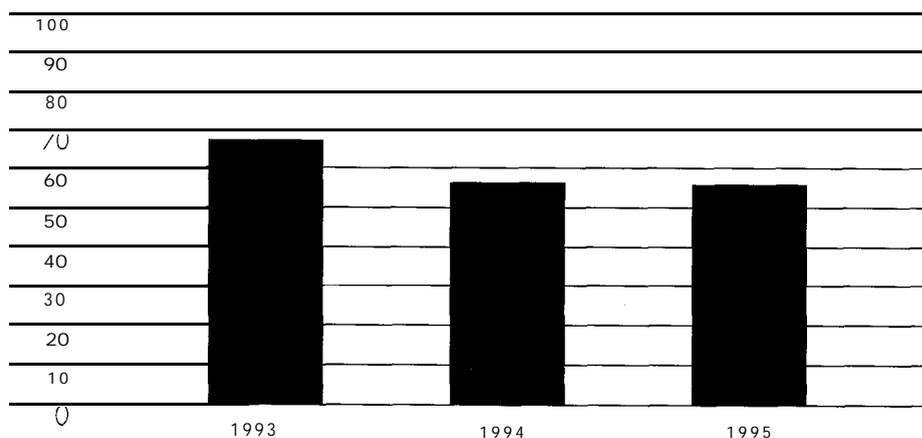
Future research

Medicare's cost sharing and uncovered services cause some beneficiaries to have high personal spending on medical care, particularly as they age. Our analysis indicates that older and female beneficiaries are at greater risk than their younger and male peers. This fact raises important policy concerns. First, as the Medicare population ages, surviving beneficiaries are more likely to be female. About 71 percent of beneficiaries 85 years of age or older are women. Second, female beneficiaries generally have lower incomes than male beneficiaries and are more likely to live in poverty. The percentage of women in the program is expected to grow as the overall Medicare population grows. We will continue to investigate the effects of Medicare's cost sharing and uncovered services on this and other vulnerable populations. ■

FIGURE 1-7

Beneficiaries with continued high personal spending in excess of 200 percent of the 1992 average

Percentage with persistent high personal spending



Source: MedPAC analysis of 1992 through 1995 Medicare Current Beneficiary Survey, Cost and Use file.

Beneficiary income

For our analysis, we used income data from the household survey component of the MCBS. Because household surveys generally tend to underestimate income sources—such as interest, dividends, rents, veterans' payments, and unemployment and workers' compensation—(Bureau of the Census 1997) we supplemented our analysis of beneficiaries' income by considering additional data from the Social Security Administration. These additional data sources further our understanding by providing information about the composition of beneficiary income.

The elderly rely primarily on four sources of income: Social Security benefits (48 percent), dividends and interest income (19 percent), pensions and annuities (19 percent), and earnings from employment (10 percent) (see Figure 1-A). Approximately 67 percent of the elderly rely on Social Security for 50 percent or more of their total incomes. Of that group, 45 percent rely on

Social Security benefits for 75 percent or more of their total incomes (SSA 1997).

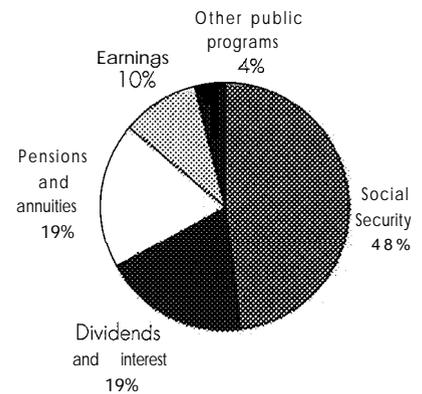
Social Security income is even more important to the elderly living in poverty. Approximately 82 percent of the poor elderly rely on Social Security benefits for 50 percent or more of their total incomes. Of this group, 71 percent rely on Social Security benefits for 75 percent or more of their total incomes.^a

Median incomes vary considerably between the general Medicare population and those living in poverty. Specifically, the Social Security Administration found that median income for the elderly population as a whole was \$11,673 in 1995, consistent with the median incomes reported in the MCBS.

However, those beneficiaries living in poverty had median incomes of \$5,556. The differences in income between poor and nonpoor beneficiaries suggests a wide and skewed income distribution for beneficiaries. ■

FIGURE 1-A

Composition of beneficiary income, 1995



Source: MedPAC analysis of Social Security Administration Annual Statistical Supplement, 1997

^a Maximum annual Social Security benefits for individuals currently older than 65 is about \$12,000.

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CHAPTER

2

**Influencing quality in
traditional Medicare**

R E C O M M E N D A T I O N S

2A The Secretary should define and prioritize programwide goals for improving Medicare beneficiaries' care. Examples of such goals might include minimizing preventable errors in health care delivery or increasing patients' participation in their care. These goals should be periodically identified and reassessed through a formal, public process involving all stakeholders.

.....

2B The Secretary should ensure that systems for monitoring, safeguarding, and improving the quality of Medicare beneficiaries' care are, to the extent possible, comparable under traditional Medicare and Medicare+Choice and that the systems are coordinated with each other as needed to maximize opportunities to reach quality improvement goals.

.....

2C The Secretary should ensure that Medicare works with other interested parties to promote the development and use of common, core sets of quality measures that represent the full spectrum of care obtained by beneficiaries.

.....

2D The Congress should provide HCFA with demonstration authority to test various mechanisms-such as payment incentives, preferred provider designations, or reduced administrative oversight-for rewarding health care organizations and providers that exceed quality and performance goals to counterbalance existing penalties for substandard performance.

.....

2E The Secretary should ensure that the methods and mechanisms used to influence quality under traditional Medicare are consistent with best practices used by private health plans and purchasers.

.....

2F The Secretary should develop and disseminate consumer-oriented information on quality of care to help beneficiaries compare enrollment options and providers. This information should include geographic area-specific information on the quality of care furnished to beneficiaries enrolled in traditional Medicare and provider-specific information on the quality of care furnished by health care facilities and practitioners participating in the program.

Influencing quality in traditional Medicare

A

s Medicare continues its transition from a relatively passive bill payer to a more active purchaser of health care services, policymakers will need to look closely at the program's systems for ensuring health care quality

for beneficiaries who obtain care under all types of health care financing and delivery arrangements. In Medicare, as in the private sector, the strategies, techniques, and activities used to safeguard and improve quality have evolved differently under indemnity insurance and managed care. Because of historical objectives, structural limitations, and legislative restrictions, fewer (and different) approaches are now used under traditional Medicare, compared to Medicare+Choice.

In this chapter

- Medicare quality policy: overview and current issues
 - Steps toward comprehensive quality assurance in Medicare
 - Strengthening quality systems in traditional Medicare
-

Stakeholders throughout the health system are beginning to appreciate the existence of a great wealth of opportunities to improve the quality of health care. Although recent concerns about quality have centered on managed care, this exclusive focus is unwarranted. Health care quality problems-and opportunities for improvement-are not confined to one type of payment system. As noted by the President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry (1998) and as evidenced by a growing and compelling health services research literature, quality problems are real, measurable, and found across all types of health care settings. The Institute of Medicine's National Roundtable on Health Care Quality likewise has reported that serious and widespread quality problems occur with approximately equal frequency in managed care and fee-for-service (FFS) systems of care (Chassin et al. 1998).

The Medicare Payment Advisory Commission (MedPAC) supports efforts by the Health Care Financing Administration (HCFA) to use its purchasing power to improve the care beneficiaries obtain under the Medicare+Choice program and would like to see similar attention extended to the traditional program, which continues to serve most beneficiaries.' State-of-the-art systems for monitoring, safeguarding, and improving health care quality must be developed and implemented for the Medicare program as a whole. Using uniform quality assurance and improvement approaches, to the extent possible, would ensure a level playing field for health care providers and comparable protections for beneficiaries. Coordinated systems also offer the advantage of ensuring programwide attention to defined priorities to improve beneficiaries' health and functional abilities.

With these objectives in mind, MedPAC offers recommendations to promote both consistency and innovation in Medicare's quality initiatives. The Secretary of Health and Human Services should ensure that Medicare's efforts to promote quality in the traditional program are comparable to, and coordinated with, its efforts to address the care furnished in Medicare+Choice plans. Those efforts also should be consistent with best practices of private health care purchasers and health plans. The Secretary should define goals for quality improvement in Medicare and work with other interested parties to identify core sets of quality measures to evaluate success in meeting those goals and to provide information for beneficiaries to use in comparing enrollment options and providers. Furthermore, Medicare should create incentives for quality improvement by rewarding health plans and providers that exceed performance goals.

This chapter begins with an overview of quality assurance and improvement in Medicare that describes the origins of these efforts and underlying reasons why they have evolved differently in managed care compared with the traditional program. It then describes steps needed to move toward comprehensive quality assurance in Medicare, noting that quality systems for Medicare+Choice and the traditional program must be developed and directed in tandem if they are to fully achieve their intended effects. The final section looks at different strategies used by purchasers and health plans to influence quality and examines how those strategies are used in Medicare. It identifies important current differences in Medicare between Medicare+Choice and the traditional program and assesses the challenges to be addressed as the program works to ensure beneficiary safety, help providers improve care, promote coordination and management of care, make quality-based purchasing and payment decisions, and empower beneficiaries as informed health care consumers.

Medicare quality policy overview and current issues

As a better understanding of the nature and extent of quality problems has spread through the health system, attention has turned to the policy question of how to create systems to foster continual improvements in patient care. As the largest payer for health care services and a de facto regulator of the health system, Medicare can play a pivotal role in influencing health care quality by developing and using such systems.

The evolving rationale for Medicare's quality initiatives

Given the dearth of data on health care quality up until recent years, policymakers' concerns about quality of care historically have related to efforts to control health care costs. The root source of these quality concerns was the fear of repercussions associated with introducing financial incentives to withhold care, combined with a common assumption that providing more care necessarily meant obtaining better care.

These concerns are evident in the history of quality systems in the Medicare program. The introduction of the prospective payment system for hospitals led directly to the development of the peer review system, which was designed to ensure that medically necessary care was provided in the most appropriate setting.² The rise of Medicare managed care, under which plans are paid prospectively to meet beneficiaries health care needs irrespective of the quantity of services delivered, similarly led to the development of the Quality Improvement System for Managed Care (QISMC), a program that will require Medicare contractors to make significant investments in systems to improve care and tools to show they have done so.

1 Approximately 84 percent of Medicare beneficiaries are enrolled in the traditional Medicare program.

2 The professional standards review organizations, which preceded the peer review organizations, were charged with identifying and eliminating medically unnecessary hospitalizations and did not address quality of care.

The development of new information on the pervasiveness of quality problems has led to a change in the underlying rationale for policymakers' concerns about quality. Recent research has shown that quality problems exist across the entire health care system, under all financing and delivery arrangements and across all types of service sites. It also has shown that services that can improve patients' health and functioning are underused even when providers have financial incentives to provide them, that errors needlessly occur because of poorly designed health care processes and systems, and that many medical services are furnished that offer no benefit and that even may expose patients to unnecessary risk.³ These findings highlight the importance of systemwide, comprehensive quality assurance and improvement.

Objectives and orientation of quality assurance and improvement activities

The objectives for quality assurance in Medicare have changed over time. The philosophy underlying the establishment of Medicare's peer review organizations (PROs), originally instituted to provide retrospective case reviews of the hospital care that beneficiaries obtained, was to ensure that beneficiaries' care was at least no worse than that obtained by the rest of the population. Given this orientation, PROs were responsible for uncovering incidents of poor quality care. The Institute of Medicine and other influential groups criticized this approach and called for changing Medicare's quality initiatives from punitively focusing on outliers to improving systems and processes associated with health care delivery (Lohr 1990). Medicare since has adopted a different objective, continuous quality improvement, under which quality is regularly assessed, addressed, and reassessed. This objective is reflected in many, if not most, of Medicare's current

quality initiatives for health care providers and health plans, and is consistent with the current responsibilities of the quality improvement organizations (QIOs).⁴

The issue of whether to orient quality initiatives toward care provided to individuals or to populations is of current interest in the health policy and public health communities. Medicare's systems currently provide a blend of both, featuring individual protections and quality safeguards combined with population-based measurement and improvement initiatives. The emphasis has been on the latter, however, since the QIOs' contractual obligations changed in the early 1990s to emphasize profiling of physician practice patterns over retrospective review of individual episodes of care (Jencks and Wilensky 1992).

Medicare's role in addressing quality

Differences in Medicare's responsibilities under the traditional program and risk contracting arrangements suggest that some differences in the nature and scope of activities the program uses to safeguard and improve quality might be appropriate. Under the traditional program, Medicare performs both those functions normally associated with a health care purchaser (payment for care) and those normally undertaken by a health plan (insurance and administrative functions). By contrast, Medicare risk arrangements limit the program's role to that of health care purchaser.

Because Medicare's responsibilities under the traditional program include those of both health care purchaser and health plan, the program conceivably could employ strategies associated with both roles in its efforts to influence health care quality. To date, however, the traditional Medicare program has

adopted few of the quality assurance and improvement strategies many health plans use to influence care.

Medicare has assumed a variety of roles in its quality assurance and improvement policies but has adapted them differently in the traditional and managed care programs and across various provider types, including hospitals, physicians, skilled nursing facilities, and home health agencies. These roles include insurer of safety, or beneficiary protector; quality improvement partner; empowerer of the beneficiary, or consumer advocate; and active purchaser of health care. Quality-oriented health care management is another strategy that Medicare does not use now, but could use in the future. Historical objectives, technical constraints, and legislative restrictions have contributed to the current, significant difference in quality programs across Medicare.

Legislative restrictions constrain the extent to which Medicare can employ certain strategies and activities used by private purchasers and health plans to influence health care quality. Among those restrictions posing the greatest constraints are a prohibition on constraining beneficiary choice of providers and a prohibition on Medicare's interference in the practice of medicine, which might be interpreted to preclude a wide range of quality-based purchasing or management activities. Some Medicare policy experts have suggested that these constraints need to be revisited if traditional Medicare is to be able to compete with private health plans on quality and cost parameters (Etheredge 1998, Scanlon 1998). Absent such flexibility, Medicare will be unable to introduce many health care management and purchasing strategies that could be used to affect quality in the traditional program.

3 Chapter 3 of this report considers the issue of Medicare's role in addressing the problem of health care errors.

4 The organizations now prefer to be called quality improvement organizations because they believe this name reflects the scope and orientation of their current responsibilities better than peer review organizations, the term used in statute and by HCFA.

Establishing accountability for quality

In the Medicare+Choice program, health plans (or their sponsoring organizations) serve as Medicare's contractors and natural units of accountability, but Medicare's traditional program holds numerous actors accountable for the quality of care provided. At present, Medicare holds:

- individual practitioners responsible for providing appropriate care in discrete episodes,
- health care facilities responsible for meeting participation standards, and
- QIOs responsible for improving quality at the state level.

Under the Medicare+Choice program, health plans are responsible for ensuring that beneficiaries receive the care they need. No similar accountability exists under the traditional program, although it might rest in part with the beneficiary, in part with the program, and in part with the beneficiary's primary care provider (where such a relationship has formed).

Traditional Medicare lacks some of the accountability mechanisms of Medicare's health plan contracting arrangements. Among the most essential differences is that providers under traditional arrangements do not assume responsibility for defined populations of beneficiaries. The absence of such responsibility makes it difficult to evaluate the care delivered to a defined population. For instance, it is possible to calculate a health plan's influenza vaccination rate by dividing the number of enrollees by the number vaccinated during a particular period of time. A similar calculation can be made for the traditional program as a whole or for any defined geographic area with a sufficient population. But because no individual physician or group of physicians is responsible for providing this service to any particular beneficiary under traditional Medicare,

the program lacks the direct accountability that exists under contracting arrangements.

On the other hand, establishing meaningful accountability under contractual arrangements with health plans can be compromised by a different type of concern. Specifically, extensive overlap among provider networks can reduce a purchaser's ability to differentiate plans **meaningfully** on the quality of care they provide or other important aspects of performance. The Buyers' Health Care Action Group, a group purchasing cooperative in Minneapolis, addressed this problem by contracting directly with networks of providers and restricting providers' ability to participate in multiple networks. As a larger, market-driving purchaser with public responsibilities and accountability, however, Medicare would face numerous challenges in adopting such an approach.

Steps toward comprehensive quality systems in Medicare

MedPAC offers five recommendations to strengthen Medicare's ability to provide comprehensive quality assurance to all beneficiaries, irrespective of their choice of health care financing and delivery arrangements or the providers seen. The Commission calls for the program to:

- define and prioritize goals for improving beneficiaries' care,
- structure quality improvement efforts to be comparable and coordinated programwide,
- work with other stakeholders to ensure investment in the quality measures and health information systems needed to assess quality,
- establish positive incentives for quality improvement, and
- use quality improvement mechanisms and methods that are consistent with best practices.

Establishing programwide goals for improvement

The complexity and interrelatedness of today's health system suggest that quality improvement goals need to be consistent at a broad, comprehensive level. Health care providers rarely work in isolation; the health system has developed increasingly complex relationships among health care providers and organizations. For example, one physician might participate in Medicare, Medicaid, and several managed-care and indemnity health plans while maintaining admitting privileges at one or more hospitals. In such a system, disparate agendas to improve quality sponsored by different payers, plans, professional organizations, facilities, and private accrediting bodies are likely to diffuse into limited relevancy. They also are likely to yield inefficient use of quality improvement resources.

At present, HCFA separately defines quality improvement priorities for QIOs and for health plans participating in Medicare+Choice. The six national priorities for quality improvement that HCFA will require QIOs to address during the current three-year contracting cycle are acute myocardial infarction, diabetes, congestive heart failure, pneumonia, stroke/transient ischemic attack/atrial fibrillation, and breast cancer. Health plans, by contrast, are required under QISMC to conduct two quality improvement projects annually, one that the plan defines to target its enrollees' specific health care quality concerns and a national project determined by HCFA (diabetes in 1999).

By defining programwide quality improvement goals that provide a framework for selecting operational improvement goals, Medicare could benefit both from a clearer focus on issues important to beneficiaries' care and increased programwide coordination of efforts to address those issues.

RECOMMENDATION 2A

The Secretary should define and prioritize programwide goals for improving Medicare beneficiaries' care. Examples of such goals might include minimizing preventable errors in health care delivery or increasing patients' participation in their care. These goals should be periodically identified and reassessed through a formal, public process involving all stakeholders.

At the program level, goals for improvement need to be sufficiently broad to encompass quality issues that affect beneficiary care under all payment arrangements and at all service sites. These goals can be used to define specific improvement projects for health care organizations or facilities. For example, if Medicare were to adopt reducing errors in health care delivery as a quality improvement goal, hospitals participating in Medicare might establish targets for reducing medication errors, while quality improvement organizations and health plans might focus on errors that occur in providing certain ambulatory care services.

The process used to define and prioritize goals for improving Medicare beneficiaries' care will be key in determining the success of that effort. Selecting appropriate quality improvement goals will require the program to draw on public health experts, providers, beneficiary representatives, private accreditation and quality improvement organizations, and others who can help weigh the evidence, set priorities among competing goals, and assess the potential for improvement in particular areas. To focus attention and conserve health care resources, the program also should consider how potential goals for improving beneficiary care relate to the quality improvement goals established by prominent public and private groups. Medicare's goals must be periodically revisited and revised as new data become available, new opportunities for improvement are identified, and existing goals are met.

Structuring quality improvement efforts

Medicare is one program involving numerous distinct payment systems and service sites. Separate quality systems focusing on different health objectives are unlikely to have the impact that one cohesive, coordinated system might.

RECOMMENDATION 2B

The Secretary should ensure that systems for monitoring, safeguarding, and improving the quality of Medicare beneficiaries' care are, to the extent possible, comparable under traditional Medicare and Medicare+Choice and that the systems are coordinated with each other as needed to maximize opportunities to reach quality improvement goals.

Medicare's quality systems for different health care delivery settings have evolved independently, meaning that the strategies for ensuring and improving quality and the tools for assessing progress have been only minimally coordinated. By creating uniformity in quality initiatives across payment systems and service settings, Medicare could ensure fairness for providers and comparable protections to beneficiaries under traditional Medicare and Medicare+Choice. At the same time, maintaining distinct quality assurance and improvement programs for specific types of health care (such as home health care or hospital care) ensures focused attention on the quality issues of greatest importance in those areas.

Addressing many health care quality concerns, particularly those relating to chronic disease and disability, also requires a coordinated effort that goes beyond focused service-site-specific quality initiatives. To enable QIOs to address such sophisticated improvement goals, Medicare might need to give the organizations more tools to obtain data that represent the full spectrum of care. For example, Medicare might require health care facilities and organizations participating in the program to contract with the QIOs.

Investing in tools for assessing quality

Strengthening Medicare's traditional quality program will require investments in new tools for assessing quality. Medicare needs measures of health care quality to evaluate the performance of individual health plans, the program as a whole, each type of health care financing and delivery arrangement, and the health care facilities and practitioners participating in the program. Health care organizations and providers need information systems that enable them to report on the quality of care they furnish accurately and efficiently.

Quality measures and measurement methods

The program needs quality measures that reflect the full spectrum of health care beneficiaries use. To ensure the efficient use of resources and to avoid diffusing the incentives for improvement created by measuring and reporting on particular aspects of care, the development and use of such measures must be coordinated among health care purchasers, health plans, providers, consumer representatives, and others interested in information on quality.

RECOMMENDATION 2C

The Secretary should ensure that Medicare works with other interested parties to promote the development and use of common, core sets of quality measures that represent the full spectrum of care obtained by beneficiaries.

Quality and performance measurement is a critical part of nearly every modern quality assurance and improvement effort. Measures can be used to identify opportunities for improvement, evaluate success in doing so, and compare alternative health care providers. The ability to measure quality creates a vast new array of quality improvement strategies not previously feasible.

Only within the past few years have quality measures become available to assess the care provided to the elderly and disabled Medicare population. Measures for evaluating the care provided to beneficiaries enrolled in managed care plans were developed as part of the Health Plan Employer Data and Information Set (HEDIS). One performance measure developed as part of Medicare HEDIS, the Health Outcomes Survey (HOS), represents the first global outcome measure available for assessing beneficiaries' health status.⁵ Surveys designed to assess Medicare beneficiaries' experiences in obtaining care under both managed care and fee-for-service arrangements were developed as part of the Consumer Assessment of Health Plans (CAHPS) initiative.

Some of the new tools for Medicare quality assessment, including both HEDIS and CAHPS, were developed with private-sector quality organizations, employers, and other stakeholders. Cooperative development adds to the value of the resulting products by ensuring a common purpose and approach, even though specific measures may vary because of differences in the populations, data issues, or other differences between Medicare and private-sector insurance programs. A private-sector organization now in development, the National Forum for Health Care Quality Measurement and Reporting, may provide an opportunity for HCFA to expand its work with other stakeholders to define common interests in quality measurement and to coordinate means for collecting data on quality.⁶ The Performance Measurement Coordination Council-established to coordinate the efforts of three national accreditation programs that promote use of quality measures-also might provide a vehicle for accomplishing these goals.

Limitations in quality measurement methods continue to present challenges, however. For example, to make fair comparisons among health plans or providers, risk adjusters are needed to account for differences in underlying populations. Because measures of health care outcomes are believed to be more sensitive to such differences, HCFA uses measures of health care processes to make comparisons across health plans and outcome measures to evaluate performance within a plan over time. The HOS, an exception to this rule, will be risk adjusted, although the methods used for making adjustments have yet to be worked out. Other technical problems relate to the ability to report accurate measures. HCFA's audits of HEDIS performance data reported by plans have revealed significant problems in the accuracy of reported data due to incomplete encounter data, difficulty in integrating data from various providers, errors in using quality measurement techniques, and other issues. Many such problems have been attributed to limited experience with quality measurement.

An additional issue is the uneven progress in developing quality measurement methods, with greater advances in methods applicable to managed care arrangements than with those for traditional Medicare. For example, measuring the quality of care provided in individual physicians' offices presents at least two technical challenges. The first is insufficient sample sizes to conduct reliable measurement using many existing measures. The second is defining the denominator to be used in making measurements. Under traditional Medicare, beneficiaries can see as many or as few providers as they wish and do not necessarily have a primary care physician who accepts responsibility for coordinating and managing their care.

Because reporting data on performance creates strong incentives to improve, quality measures should focus on the health care processes and outcomes that are important for beneficiaries' health and functional status. Measures to assess many important aspects of the quality of beneficiaries' care are still lacking. For example, many more measures of preventive care have been developed than for chronic care. In addition, few measures have been developed to assess the effectiveness of efforts to coordinate care across service sites. To use comparable quality systems across Medicare's delivery settings, quality measures that reflect the full spectrum of beneficiary care provided at all types of service sites must be developed and used.

Health data and information systems

Numerous types of data from various sources are used in quality measurement, including:

- administrative data, such as enrollment records or claims;
- medical data, including information from medical records and clinical laboratory reports; and
- survey data, including information on patients' satisfaction with their health care, experiences obtaining care, or health and functional status.

Although some of the data used in quality measurement are collected to serve in other administrative functions or care management efforts, accessing these data for quality measurement purposes can be challenging. Using such data can be prohibitively expensive, particularly because many types of health data, including medical records, are stored primarily in written form. For example, health plans' costs associated with HEDIS performance measurement were

5 The Health Outcomes Survey was known until recently as Health of Seniors. HCFA changed the name when it decided to expand use of the survey to include disabled beneficiaries.

6 The President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry recommended developing such an organization to promote effective and efficient measurement of health care quality throughout the health system.

estimated to range from \$20,000 to \$700,000 per measure (Eddy 1998). Privacy concerns present barriers to collecting or accessing certain types of data, particularly data that are traceable to individual patients. Finally, depending on how they are structured, health care organizations and payers may not have easy access to data collected by individual providers.

Health care providers and plans need accurate and reliable information systems to collect the data used to measure health care quality. To foster accurate and efficient quality measurement, a number of steps are needed. First, a number of elements of data collection must be standardized, including elements of data sets and terminology. Second, health data systems must be automated to allow for easier transfer and use of data. Third, information collection systems need to be designed so as not to create new record keeping and paperwork burdens for physicians and other health care providers. Finally, privacy concerns must be addressed by developing appropriate encryption methods and by limiting access to data to authorized users.

Medicare is confronting these challenges as it implements quality measurement and reporting systems for health care providers and organizations participating in the program. A notable example is the Outcomes and Assessment Information Set (OASIS), developed to collect information on patient functioning and health status in the home health setting. HCFA originally planned to require submission of OASIS data by participating home health agencies beginning in April 1999 but delayed implementing this requirement until further notice because of privacy concerns.

Establishing incentives for quality improvement

Another issue Medicare must address in considering its traditional quality initiatives is the extent to which the program relies on performance incentives versus penalties for substandard

performance. Medicare's current policies include sanctions for health care organizations and providers who fail to meet minimum standards of quality and beneficiary safety but no rewards or other incentives to exceed performance expectations.

RECOMMENDATION 2D

The Congress should provide HCFA with demonstration authority to test various mechanisms-such as payment incentives, preferred provider designations, or reduced administrative oversight-for rewarding health care organizations and providers that exceed quality and performance goals to counterbalance existing penalties for substandard performance.

With the development of better tools for evaluating quality, Medicare increasingly has the ability to distinguish among poor performers, adequate performers, and exceptional performers. Until recently, establishing performance-based incentives was not possible because most of Medicare's standards for providers and organizations were structural (such as licensure or use of an internal quality assurance program), meaning the standards could either be met or not met, but not exceeded.

Under its new quality system for managed care plans participating in Medicare, HCFA will have information to distinguish among the levels of performance and health care quality its contractors provide. The agency expects to define a floor level of performance by designating minimum quality standards that plans must meet or risk contract renewal. Conceivably, however, HCFA also could establish benchmarks of performance and incentives for plans to attain those levels. Possible incentives could include designating excellent plans in comparative materials provided to help beneficiaries make enrollment decisions, differentiating beneficiary premiums to steer enrollment toward better plans, or linking Medicare payments to the health plans to quality

findings through a performance-based payment system. The program also might find a way to relieve exceptional performers from some of the burden of demonstrating compliance with the program's rules, perhaps by reducing the frequency of compliance reviews.

Performance incentives also might be established in the traditional program to reward exceptional performance. Certain sectors of the health care delivery system have quality measurement systems that might be developed for use in this manner, but limitations in the ability to assess and compare quality routinely in most sectors, including hospitals and individual physicians' offices, limit widespread implementation in the short term.

Using strategies that are consistent with best practices

-Although differences in the nature or extent of Medicare's quality assurance and improvement activities under the traditional program and Medicare+Choice could appropriately reflect the differences in Medicare's responsibilities under those programs, all of Medicare's quality-related activities should be consistent with best practices.

RECOMMENDATION 2E

The Secretary should ensure that the methods and mechanisms used to influence quality under traditional Medicare are consistent with best practices used by private health plans and purchasers.

As one of the largest purchasers of health care, Medicare has considerable influence over the industry, and the strategies and activities relating to quality that it adopts affect providers, plans, and consumers nationwide. Therefore, decisions about where to focus Medicare's resources and attention, in terms of quality assurance and improvement strategies, determine directions for the industry and affect all health care consumers.

Unfortunately, little is known about which quality assurance and improvement activities have a demonstrable and substantial impact on the quality of care. Carefully designed research initiatives and demonstrations of alternatives are needed to obtain and assess data on the effectiveness of these activities. Relevant information on the relative effectiveness of quality improvement activities may be forthcoming. The Agency for Health Care Policy and Research plans to award up to \$2 million in fiscal year 1999 to support as many as five studies to evaluate strategies for improving health care quality—such as continuous quality improvement, use of regulations, behavioral interventions, and educational interventions—that are now widely used by organized quality improvement systems. Pending better information, Medicare should take steps to ensure that its quality initiatives are both consistent and coordinated with the practices of other influential purchasers and plans to avoid sending mixed signals to the health system without due cause.

Strengthening quality systems in traditional Medicare

Medicare, like other purchasers and health plans, employs a variety of strategies to influence quality. At present, the strategies used for traditional care arrangements differ substantially from those used for managed care. Medicare's quality activities also differ from those of private purchasers and plans that have been recognized for leadership, particularly in that the program has to date made limited use of quality-based purchasing and quality-oriented management techniques.

Ensurer of safety/beneficiary protector

The role that characterizes the preponderance of Medicare's past and current quality-related activities is that of

ensurer of beneficiary safety. In this capacity, the program has established ground rules for health care providers and plans that serve beneficiaries, systems for addressing grievances and appeals, and a quality-policing function. The roles of private-sector purchasers and plans have evolved somewhat differently.

Medicare's conditions of participation

Ground rules for serving Medicare beneficiaries, known as conditions of participation (COPs), vary considerably by type of health care provider or organization. At present, any provider or organization that meets HCFA's ground rules is eligible to participate in the program unless specifically excluded, a process that normally occurs only when egregious violations have been found and following an administrative procedure that provides due-process protections for the provider in question.

Many of Medicare's participation requirements were established to serve as proxies for quality or to otherwise serve as consumer protections because—until quite recently—few tools were available to assess the quality of health care beneficiaries receive and little was known about techniques for influencing that care. Perhaps the best example of such a requirement is Medicare's so-called SO-50 rule for participating health plans, which capped enrollment of publicly insured (Medicare and Medicaid) beneficiaries at 50 percent of a plan's total enrollment. Many program stakeholders found this requirement to be of questionable value as a quality proxy. Judging it to be obsolete with the development and use of better quality-assessment mechanisms, the Congress eliminated the 50-50 rule under the Balanced Budget Act of 1997 (BBA).

The net effect of Medicare's COPs, including those designed as consumer and patient protections or to serve as safeguards against quality problems, has been to establish a floor or baseline of minimum quality. In the past, this floor was largely determined by adherence to

minimum structural requirements, such as licensure and maintenance of an internal quality improvement system. Such requirements are sometimes questioned, however, because the relationship between structural features and patient outcomes has not been adequately studied. For most providers, including physicians and hospitals, structural requirements still determine the floor. With the implementation of new Medicare+Choice requirements, however, HCFA expects to base the floor for health plans partly on objective assessments of actual performance.

Medicare presently uses different approaches to monitor providers' and plans' compliance with program requirements. Health care facilities demonstrate their compliance with COPs by obtaining either accreditation from an approved private-sector entity or certification from a state agency that has a contractual relationship with HCFA. HCFA now monitors Medicare+Choice plans' compliance with program requirements through site visits conducted by agency personnel, although private accreditation is likely to play a role in health plan monitoring in the future. The BBA authorized the agency to accept private accreditation by approved entities in place of direct oversight for some, but not all, of the quality-related requirements established in legislation. HCFA will define a process for assessing which accrediting bodies have standards and review mechanisms that are at least as stringent as Medicare's.

Accreditation and credentialing in the private sector

Accreditation and credentialing standards serve as private-sector analogs to Medicare's COPs. These standards do not always serve as floors, however. In some cases, accreditation is designed to distinguish top performers.

A growing number of large purchasers require the plans they contract with to attain accreditation from a private standard-setting body, although most purchasers as yet do not (Gabel et al.

1998). Medicare's COPs tend to lag private accreditation standards, in part due to infrequent updating of the COPs and the extensive public comment process required under Medicare. For example, HCFA's COPs for hospitals, last updated in 1986, do not require hospitals to measure and report to HCFA on the quality of care they furnish. The predominant hospital accrediting body, the Joint Commission on Accreditation of Healthcare Organizations, on the other hand, has recently added such requirements. A notable exception to this rule of lagging the private sector occurred with the introduction of QISM standards for health plans participating in Medicare, in which Medicare went beyond private-sector standards established by the National Committee for Quality Assurance by requiring that plans demonstrate actual quality improvement.

Credentialing programs are used by health care facilities and health plans to check practitioners' qualifications and background against defined structural requirements (such as board certification). Although these programs do not currently include measures of health care quality, the American Medical Association (AMA), through its American Medical Accreditation Program, is defining measures that could be used in a national program designed to replace multiple duplicative credentialing programs. In this effort, the AMA is working closely with the specialty societies and other groups that are defining appropriate performance measures for medical professionals.

Systems for grievances and appeals

Medicare's systems for addressing beneficiary grievances and appeals differ for managed care and the traditional program. For managed care enrollees, Medicare's systems constitute an external process that supersedes the internal

processes plans have for resolving coverage concerns and other types of complaints. For beneficiaries in the traditional program, Medicare's systems are the first venue for addressing beneficiaries' concerns about the program or its providers.⁷ Medicare's quality improvement organizations provide a forum for investigating beneficiary complaints about the quality of their care.

Use of grievances and appeals systems varies considerably in the private sector. Nearly all plans offer internal grievance and appeals processes to resolve members' complaints and to provide an outlet for reconsidering coverage or payment decisions. However, as ongoing debate over the potential enactment of a patients' bill of rights demonstrates, there is by no means universal agreement on the need for a binding external system for appealing coverage decisions.

Quality policing

Medicare has scaled back its role in actively seeking and redressing individual instances of substandard care. This function was historically delegated to peer review organizations, state-based groups of medical professionals, quality experts, and statisticians. Until recently, these organizations served primarily as case reviewers, investigating individual instances of hospital care suspected to be substandard, and levying financial penalties or, in certain cases, beginning a process of program exclusion. With the significant changes in these organizations' functions that HCFA has gradually implemented over the past six years, their responsibilities for case review have greatly diminished. At present, HCFA estimates that each QIO initiates approximately four inquiries a year to follow up on investigations that have yielded evidence of serious violations, and that about one case per QIO per year results in provider exclusion, fines, or other sanctions.⁸

Although private-sector purchasers do not normally adopt a quality-policing role per se, health plans do so in the form of prior authorization and utilization review programs. These programs are generally set up internally or under contractual arrangements to provide a check on providers' decisions about appropriateness of services or referrals to specialists.

Quality improvement partner

The idea of collaborative activities geared toward quality improvement is relatively new to both Medicare and the private sector.

Plans' and purchasers' collaborative quality improvement activities

Health plans often work with network providers to improve quality by developing and disseminating practice guidelines, conducting provider profiling and feedback, and sponsoring educational programs (Gold et al. 1995). Use of such activities is more extensive in the more tightly structured plans. Also, these efforts may be focused more or less on quality concerns than cost control.

Some private purchasers have also developed collaborative relationships with their contractors in efforts to improve quality. Xerox, for example, instituted an active health benefits management program several years ago, in which the company developed long-term contracts with plans and worked with them to define concrete goals and activities for improving employees' health. This type of activity is now being carried out by only a small group of large employers and purchasing cooperatives, however.

7 Beneficiaries can apply to an administrative law judge to appeal coverage decisions made by Medicare's carriers or fiscal intermediaries.

8 Provider groups and others have raised concerns that the new payment error prevention program—which requires QIOs to address, unnecessary hospital admissions and miscoding—could instigate a return to adversarial relations between providers and QIOs. HCFA, however, states that the program will emphasize correction of mistakes and education of the provider community rather than investigation of fraud.

Medicare's quality improvement partnerships

Medicare's recent steps to become a quality improvement partner are best represented by the change in responsibilities of Medicare's state-based contractors for external quality assurance (Jencks and Wilensky 1992). In contrast to the former PROs, which reviewed individual cases and made retrospective assessments of quality problems, QIOs undertake focused quality improvement activities, provider profiling, and educational activities in conjunction with local providers.

Up until the contractual cycle beginning this year, each of Medicare's QIOs developed and implemented its own quality improvement projects individually, operating under the notion that the organizations were best situated to work with local providers to identify specific quality concerns. Under the new arrangements, HCFA establishes national quality improvement projects, and QIOs are under contractual obligation to demonstrate quality improvement at the state level in beneficiary health and functional areas defined by HCFA.

The role of the QIOs in evaluating the care provided in individual physicians' offices and through managed care plans participating in Medicare is still evolving.⁹ Traditionally, the organizations developed contractual relationships with hospitals that enabled them to obtain information from medical records and to keep information confidentially without concerns about plaintiffs' attorneys when malpractice suits might be pending. Entering into such relationships is, and has always been, voluntary, however. Under QISM, managed care plans have incentives to work with QIOs on national quality improvement projects because they can save much of the cost of developing quality measures and defining data requirements independently. Proposed new conditions of participation for hospitals would create similar

incentives. Individual physicians can volunteer to participate in practice profiling and other projects to improve the quality of ambulatory care.

Although available studies do not use uniformly rigorous methodology, they suggest that the QIOs' collaborative projects have resulted in measurable quality improvement. In a study of the results of the contractors' efforts under the 1996-1999 contracting cycle, HCFA found that 87 percent of the projects for which final results were available had improved quality by at least one measure (HCFA 1998). The significance of those findings is difficult to characterize, however, since each project used different improvement objectives, interventions, and quality measures. Results from the pilot project to test the QIOs' first national improvement project, which targeted heart attack care in four states, showed improvement across all quality indicators studied, with aspirin use increased from 84 percent to 90 percent and beta-blocker use increased from 47 percent to 68 percent, for example (Marciniak et al. 1998).

Quality-oriented health care management

As part of efforts designed to affect costs and/or quality, private health plans sometimes use tools such as disease management, in which patients with certain chronic illnesses are given special attention through particular monitoring, measurement, and care management activities; and case management, in which unusual or outlier cases receive monitoring and active intervention by an assigned manager who is sometimes authorized to work outside normal plan coverage or network parameters.

Research now getting under way is likely to shed some light on the extent to which these programs contribute to improved health outcomes or costs savings. A three-year study cosponsored by the Agency for Health Care Policy and Research and

the National Institutes of Health represents the first randomized controlled trial comparing costs and patient outcomes for asthma patients in a disease management program to those for patients obtaining usual care.

In its efforts to improve quality under the traditional program, Medicare does not now use many of the tools available to private health plans for managing care, although the program has taken steps to prepare for future use. The BBA required HCFA to test and evaluate the use of case management and other models of coordinated care to improve the quality of care for chronically ill beneficiaries enrolled in traditional Medicare and to reduce program spending. Demonstrations are to be conducted in at least nine sites. Under a contract with Mathematica Policy Research, Inc., HCFA is now identifying best practices for coordinating care in the private sector and plans to assess the extent to which such programs could be used under traditional Medicare. In the BBA, the Congress also authorized the Secretary to expand the demonstration and to implement components of the projects into Medicare permanently, based on evaluation findings. The BBA also provided for coverage of diabetes self-management training services under Medicare. This coverage addition offers an opportunity for evaluating the utility of such coverage for a specific population with chronic illness.

Accounting for quality in purchasing and payment arrangements

Without changes in law, limits on HCFA's ability to act as a prudent purchaser of health care will constrain efforts to influence quality under traditional Medicare although, under demonstration authority, the program may have opportunities to test active purchasing approaches that it could not otherwise implement.

⁹ End Stage Renal Disease (ESRD) Networks-which promote continuous improvement in the quality of renal dialysis care and undertake other tasks relating to ESRD program administration-serve in a role similar to that of the QIOs. See Chapter 8 for an analysis of ESRD quality issues.

Private sector use of quality-based purchasing activities

As yet, remarkably few private-sector purchasers use purchasing strategies to improve the quality of care they buy. A 1997 study by the General Accounting Office showed that although large purchasers now commonly request data from plans to document the quality of care, few purchasers incorporate such information into their contracting decisions or payment arrangements.

A few notable exceptions serve as models for quality-based purchasing initiatives that Medicare might consider in the future, however. For example, the Pacific Business Group on Health adjusts payments to plans based on their performance in providing preventive care. The Leapfrog Group, a coalition of purchasers concerned with improving health care quality, is developing selective contracting strategies designed to steer patients to certain service providers, drawing on research that shows a high correlation between volume and outcomes of certain services.

While no rigorous evidence of the effects of prudent purchasing strategies on quality has been developed, some research suggests that purchasers who use those strategies believe them to be beneficial. In a recent study of four large health care purchasers that use quality-related information (such as accreditation reports, quality measures, and satisfaction survey results) in making their purchasing and payment decisions, the General Accounting Office found that the purchasers associated those activities with improvements in access to care and employee satisfaction, as well as with cost savings (GAO 1998).

Health plans also have opportunities to act as quality-based purchasers, particularly by considering performance in defining and refining provider networks. However, most of the limited research on plans' contractual

arrangements with providers suggests that market pressures that reward plans with large or loose networks, combined with cost constraints, still play predominant roles in defining networks (Gold et al. 1995, Hurley et al. 1996).

Quality-based purchasing by Medicare

Use of quality-based purchasing activities is now quite limited in Medicare. Other than requiring conditions of participation, such as licensure, to be met, HCFA has not traditionally incorporated information about health care quality and performance into its decisions about which health plans and providers can participate in the Medicare program. The agency also has not tried to differentiate plans or providers on the basis of their demonstrated quality or performance in making purchasing or payment decisions. Before initiating QISMC, HCFA also had not provided incentives for health care providers or health plans either to improve the quality of care they furnish or to meet minimum performance levels. In fact, the agency has been criticized for failing to take sufficient action against health plans that failed to fulfill the terms of their contracts (GAO 1995, GAO 1991 a, GAO 1988) and against hospitals consistently found to be out of compliance with conditions of participation (GAO 1991 b).

Most of HCFA's prudent purchasing initiatives focus on the managed care program, under which the agency faces fewer legislative constraints. For example, the program's new quality improvement system for managed care requires coordinated care plans participating in Medicare+Choice to demonstrate that they improve quality and meet minimum levels of quality as shown by defined performance measures. Plans that fail to do so risk exclusion from the program. Medicare's competitive pricing demonstration, which is testing the effects of allowing health plans to influence payment rates through

bidding, also provides a way for Medicare to test use of quality-based purchasing techniques under managed care. HCFA's demonstration advisory committee recommended that the agency consider withholding a small percentage of savings obtained as a result of the competitive bidding process, to be distributed among participating plans based on how well they achieve quality goals.

The Centers of Excellence demonstration represents Medicare's closest approximation of a preferred provider arrangement under the traditional program. Under the demonstration, HCFA contracts with a group of cardiovascular and orthopedic facilities to provide certain cardiovascular services or total joint replacement procedures under bundled payment arrangements. Hospitals compete to participate in the demonstration based on quality (defined primarily by volume of services provided), organizational capability, price, and geographic dispersion. Selected hospitals are designated as Centers of Excellence and are allowed to offer lower cost sharing, simplified claims processing, and lodging support as a means of attracting patients. Earlier experience with similar demonstrations for coronary artery bypass graft (CABG) and outpatient cataract surgical procedures showed opportunities for the program to achieve savings, if not quality improvements.¹⁰

HCFA's competitive pricing demonstration for durable medical equipment (DME) may provide information on Medicare's ability to be a price- and quality-conscious purchaser in the traditional program. Under the demonstration project, DME suppliers' bids will be evaluated based on the prices they will accept and evidence of the quality of their products. Losing bidders will be excluded from supplying DME to Medicare patients in the geographic areas included in the evaluation.

10 The CABG demonstration achieved an estimated savings of nearly \$40 million for Medicare over 10,000 CABGs performed at seven sites. The cataract surgery demonstration, implemented at four sites in three cities, was estimated to save Medicare more than \$500,000 for some 7,000 surgeries.

Consumer empowerment

Medicare needs to take steps to advance beneficiaries' ability to make quality-based decisions when choosing among health care providers. Although HCFA is taking steps to help beneficiaries choose between the traditional program and plans available under Medicare+Choice, similar efforts need to be extended to help beneficiaries choose among health care facilities and practitioners.¹¹

RECOMMENDATION 2F

The Secretary should develop and disseminate consumer-oriented information on quality of care to help beneficiaries compare enrollment options and providers. This information should include geographic area-specific information on the quality of care furnished to beneficiaries enrolled in traditional Medicare and provider-specific information on the quality of care furnished by health care facilities and practitioners participating in the program.

Purchasers' and plans' efforts to empower health care consumers

Employers and other purchasers who offer more than one health plan typically provide information to assist in health care choices but, as yet, they rarely include information designed to yield quality-based choices. One notable exception is the Federal Employees Health Benefits Plan, which was one of the first large purchasers to collect and analyze consumer satisfaction data for employee use in selecting plans. Xerox and GTE were also among the early pioneers in giving employees information on health care quality, providing report cards that include HEDIS performance measures and results of consumer satisfaction surveys.

With rare exceptions, health plans do little to help their enrollees make quality-based decisions about which providers to choose. One such exception is Aetna

U.S. Health Care, which grades its primary care providers along dimensions such as patient satisfaction and adherence to plan standards, then provides those grades to interested enrollees. Similarly, PacificCare gave its members a quality and consumer satisfaction report card based on profiles of its participating physician groups. The health plan recently reported that members used those data in choosing a group to enroll with. Each of the groups scoring above the 32nd percentile gained members, while groups at the 25th percentile or below lost members (Medicine and Health Daily 3/1 1199).

Medicare's consumer empowerment efforts

Although HCFA has traditionally provided for a number of activities—such as regulating health plan marketing materials and establishing processes and forums for resolving complaints and for making appeals of coverage and treatment decisions—that serve the beneficiary as a health care consumer, the program has not until recently played a significant role in helping beneficiaries to consider health care quality in deciding where and how to obtain services.

The most notable historical exception to this is the program's controversial experience in releasing hospital mortality data. Medicare published data on hospitals' mortality rates from 1986 until 1992, when it responded to concerns about data accuracy and adequacy of case-mix adjusters by ceasing to collect and report the data. One study showed that HCFA's release of patient mortality rates at individual hospitals had only a small effect on hospital use (Mennemeyer et al. 1997). For instance, patient discharges at one hospital with a death rate double that expected by HCFA dropped by less than one per week in the first year following publication of that rate. However, the underlying reasons for the lack of impact, such as insufficient

consumer awareness or a discounting of the findings by providers, are unclear. By contrast, a study of the effects of releasing data on cardiac surgery outcomes in New York State from 1990 to 1993 found that hospitals and surgeons with better outcomes experienced higher rates of growth in market share. Researchers attributed that growth to use of the information both by patients and referring physicians (Mukamel and Mushlin 1998).

The BBA expanded HCFA's role in beneficiary empowerment considerably by requiring the agency to give beneficiaries information to use in choosing among traditional Medicare and Medicare+Choice plans, including information designed to help beneficiaries judge quality of care.¹² Directly providing for informed beneficiary choice is a new responsibility, however. HCFA has already established a "Medicare Compare" site on the World Wide Web that offers basic comparative information on the Medicare program, managed care options, and individual plans available. The Web site also has some data on health care quality from consumer surveys and performance measurement initiatives. Beginning with the full national information campaign in the fall of 1999, HCFA will mail such information to all beneficiaries and will operate a toll-free telephone information line to answer beneficiaries' questions. The agency is also working with national and local consumer advocacy groups to provide additional beneficiary assistance.

Types of information needed by Medicare beneficiaries

For beneficiaries to become informed health care consumers, two types of information are needed:

- geographic area-specific information on the quality of care obtained by traditional Medicare enrollees (to help beneficiaries compare enrollment options), and

11 See Chapter 4 for MedPAC's recommendations for structuring and fostering informed beneficiary decisionmaking under Medicare+Choice.

12 The National Medicare Education Program is described and assessed in Chapter 4 of this report.

- information on the quality of care provided at specific facilities and by individual practitioners or groups of practitioners (to help beneficiaries choose providers).

In order to use information on quality in their health care decisions, beneficiaries must have information that they believe is relevant to the level of choice they face. Medicare is now developing comparative information on the quality of care provided through coordinated

care plans, and it is in the process of testing its ability to develop comparable information on quality of care under the traditional program, as required by the BBA. Under a contract with Health Economics Research, Inc., Medicare is evaluating whether reliable information can be generated by using HEDIS measures and the Health Outcomes Survey at the national, local, and physician group-practice level. The contractors' first annual report on the study's progress suggests that numerous

technical constraints—notably problems with populations too small for analysis—make many measures unreliable at the physician group-practice level and even at the local level (the two levels likely to be of greatest interest to beneficiaries) (McCall et al. 1998). However, national data on quality under Medicare may not be sufficiently compelling to factor into beneficiaries enrollment decisions. ■

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C H A P T E R

3

**Addressing health care
errors under Medicare**

R E C O M M E N D A T I O N S

3A The Secretary should establish patient safety as a quality improvement priority for Medicare and should take steps to minimize the incidence of preventable errors in the delivery of care provided to beneficiaries.

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3B The Secretary should support and make use of ongoing public and private error-reduction initiatives-including those that promote incident reporting by providers, analysis of root causes and patterns in occurrence, and dissemination of information designed to prevent recurrence-through Medicare's policies and quality improvement activities.

.....

3C The Congress should enact legislation to protect the confidentiality of individually identifiable information relating to errors in health care delivery when that information is reported for quality improvement purposes.

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3D The Secretary should consider opportunities for minimizing avoidable errors in health care delivery through coverage and payment policies, quality measurement initiatives, and quality improvement programs.

.....

3E The Secretary should work with providers and other stakeholders to identify and promote effective and efficient processes, structures, and activities for reducing preventable errors and to set progressive targets for improvement in patient safety through Medicare's quality improvement programs.

.....

3F The Secretary should not establish requirements that specify maximum tolerance rates of errors in health care delivery under Medicare's conditions of participation for health care providers.

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3G The Secretary should fund research to study appropriate use of autopsies and to evaluate approaches for using information derived from autopsies in health care quality improvement and error-reduction initiatives.

Addressing health care errors under Medicare

Preventable errors in health care delivery contribute to unnecessary patient injuries and health system costs. Reducing errors in the care provided to Medicare beneficiaries could improve beneficiaries' health and functioning and reduce program costs. The experience of other potentially dangerous and safety-conscious industries has shown that errors can be reduced by improving the systems and processes associated with health care delivery and by creating an environment in which errors are seen as opportunities for learning. Therefore, MedPAC recommends that Medicare establish patient safety as a quality improvement priority and take steps to reduce errors in the care provided to beneficiaries.

In this chapter

- Errors: a critical health quality problem
 - Resources for addressing health care errors
 - Minimizing preventable errors under Medicare
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Health care providers, researchers, policymakers, and others concerned with the public's health have voiced a call to increase patient safety by addressing errors in the delivery of health care. Responding to and amplifying this call, the President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry selected reducing health care errors as one of six national aims for improvement (1998). Health care leaders envision a day when the industry works systematically to avoid preventable errors, actively identifies and openly acknowledges them when they do occur, makes commensurate reparations to injured parties, identifies root causes of the problems, and takes whatever steps are necessary to see that the industry collectively avoids similar errors in the future.

The Medicare Payment Advisory Commission (MedPAC) has considered Medicare's role in advancing toward this goal. This chapter presents MedPAC's initial findings and recommendations on how the program might minimize preventable errors. It begins by characterizing the nature and extent of the problem. It then looks at error-reduction theories, methods, and mechanisms and highlights exemplary activities and initiatives. The chapter describes Medicare's current policies for addressing errors, then identifies other approaches that might be taken as part of an improved and refocused effort. It then presents MedPAC's analysis of Medicare's potential to enhance the safety of beneficiary care through increased effort to avoid misuse of medications and through improved use of hospital autopsies—two issues of current policy interest.

Based on the considerations and findings described in this chapter, the Commission recommends that Medicare establish patient safety as a quality improvement priority. The Secretary of Health and Human Services should ensure that the program acts to reduce errors through existing mechanisms, works with providers and others to identify and

promote effective and efficient error-reduction processes, and supports ongoing public and private safety initiatives. To promote the success of these initiatives, the Congress should enact legislation to protect the confidentiality of information about occurrences of error when reported for quality improvement purposes. The Secretary should define and regularly update target rates of improvement in patient safety, rather than specify and enforce maximum tolerance rates of errors.

While the Commission does not currently offer specific recommendations for addressing medication errors, it notes that the problem is a source of preventable costs and patient injuries and that some hospitals have reported savings and improved patient care through use of automated systems for entering physicians' medication orders.

MedPAC believes that improved use of autopsies can aid in reducing errors as well as advance the field of medicine and enhance individual physicians' knowledge. Therefore, the Commission calls on the Secretary to fund research to study appropriate use of autopsies and to evaluate approaches for using information derived from autopsies in health care quality improvement and error-reduction initiatives.

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Errors: a critical health quality problem

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Noted health care researcher and analyst Lucian Leape (1994) describes errors as unintended actions or failures to act, and actions or inactions that do not achieve their intended outcomes. By this definition, not all errors are preventable. Sometimes, poor outcomes are a predictable but unavoidable result of incomplete knowledge or imperfect technology, as in instances when a laboratory test with a known error rate returns a false positive or negative finding. But other health care delivery

errors can be both anticipated and prevented. Doing so is fast becoming a national priority for quality improvement.

Opportunities for error are compounded by the complex and interrelated factors—human, systemic, and technical—associated with health care delivery today. Individual physicians, nurses, pharmacists, other health care practitioners, and patients inevitably make mistakes in judgment, overlook a symptom, fail to use medication or equipment properly, or misinterpret a finding. The health care processes and systems used by health care organizations and facilities, in some cases influenced by payers or other external forces, largely determine the extent to which opportunities for error will arise. Furthermore, the devices, machines, medications, and other equipment used in treating and diagnosing patients play an important role in determining health care safety and can also serve as a source of error.

A growing body of health services research literature has illuminated both the extent and the implications of errors in health care delivery. By extrapolating findings from the Harvard Medical Practice Study, a study of New York state medical records, Leape (1994) estimated that "180,000 people die each year partly as a result of iatrogenic injury, the equivalent of three jumbo-jet crashes every two days." Studies of such injuries consistently show that many are due to preventable errors. For example, in another facet of the Harvard Medical Practice Study, Leape and colleagues (1993) found that injuries attributable to medical treatment occurred in 3.7 percent of the hospitalizations evaluated, and that more than two-thirds of those injuries were due to errors. While most injuries did not have lasting effects on patient health, 2.6 percent caused permanently disabling injuries and 13.6 percent resulted in death (Brennan et al. 1991).

The Harvard Medical Practice Study also provided insight on the relative frequency of the types of errors occurring in hospitals that result in patient injuries. Of

the injuries attributable to error, 35 percent involved the performance of procedures or operations, 22 percent related to failures of prevention, 14 percent were diagnostic errors, 9 percent medication errors, and 2 percent were classified as system or other errors, such as defective equipment or supplies (Leape et al. 1991).¹

Errors in ordering, transcribing, dispensing, and administering medications result in adverse drug events (ADEs) that are costly and often preventable. The Adverse Drug Event Prevention Study, which looked at data from two tertiary care hospitals, found that such events occurred in 6.5 percent of admissions; of these, 28 percent were judged preventable (Bates et al. 1995). Researchers estimated that hospital costs for patient care were increased by \$2,595 per event overall and \$4,685 per event for the subset of events classified as preventable, which were more severe, on average (Bates et al. 1997). Another study involving one tertiary care hospital's records found that ADEs occurred in 2.4 percent of admissions during a three-year period. These events were associated with significantly longer hospital stays, increased costs, and an almost twofold increased risk of death (Classen et al. 1997).

Despite continuing advancement in diagnostic capability, errors in diagnosing patients are common and can result in adverse outcomes. Research conducted since 1938 has consistently shown that postmortem findings differ from pre-death clinical diagnoses between 35 percent and 47 percent of the time (Leape 1994, Lundberg 1998).² One recent study found that 45 percent of autopsies revealed one or more undiagnosed causes of death, two-thirds of which were considered treatable (Nichols et al. 1998). Another found that malignant neoplasms discovered at autopsy were the

underlying cause of death in 57 percent of deceased patients found to have such neoplasms (Burton et al. 1998).

Resources for addressing health care errors

Several factors make addressing health care errors particularly challenging. Health care is an exceptionally dynamic enterprise, in which new risk is always being created and emerging. In addition, health care is in the midst of a transition from a cottage industry made up of independent, individual practitioners to a more cohesive industry in which a collection of processes can be thought of as interacting within a larger system (Berwick 1989). Until recently, even hospital care has been seen as a series of separate and unrelated interactions between health care professionals and individual patients (Avom 1997).

Designing appropriate interventions for addressing health care delivery errors in Medicare requires an understanding of both the theoretical basis for error-reduction efforts and the available methods and mechanisms for reducing errors. In addition, an awareness of prominent initiatives geared toward reducing health care error is valuable, both to draw lessons and to identify ongoing private or public endeavors with which Medicare's efforts might be coordinated.

Error-reduction theories and lessons from other industries

Theories developed and used in other technically complex, potentially dangerous industries that have made safety and quality a high priority, such as transportation and energy, are attracting interest and gaining growing acceptance in health care. These industries have come to

recognize that increasing safety requires changing the focus from individuals to processes and systems and creating an environment in which mistakes are seen as opportunities for learning rather than reasons for punishment.

Researchers in safety assert that human mistakes are often the inevitable result of poor system design rather than failures in professional care or diligence (Leape et al. 1998). This has led to a change in safety-conscious industries, from viewing individuals who make mistakes as the primary instigators of problems to seeing them instead as contributors or agents who trigger underlying defects in established processes, routines, or systems, or even as agents who are set up to fail by those underlying defects.

Increasing health care safety therefore requires paying attention to design of systems and processes used in patient care. Safety leaders in aviation and nuclear power have designed processes and systems that can improve consumer safety by reducing hazards and have worked to create a culture of vigilance. They have trained professionals to use methods designed to promote safety, to work in teams, and to solve problems in simulated emergency situations. They advocate designing systems to reduce opportunities for human error and introducing backup systems meant to keep adverse events from occurring as a result of those errors.

Many experts have observed that advancing safety in health care will require the industry to move beyond blame and punishment of individuals. Belief in the effectiveness of punishment as a means of error prevention in health care has posed challenges for implementing efforts to increase safety (Leape 1994). Rather than improving safety, the threat of punishment provides strong incentives for people to conceal errors when they do occur.

1 Of the total errors identified, 18 percent could not be classified.

2 Such findings do not indicate that quality of care is unchanged over time. On the contrary, advances in medicine have led to accurate diagnosis of many conditions that previously could not have been detected by either clinical exams or postmortem tests.

A shift from the culture of individual blame will be required to create an environment in which errors are seen as opportunities for learning. The health care industry must systematically avail itself of such opportunities if real advancement in error reduction is to occur. Doing so will require creating an environment in which investigating errors and taking active steps to improve processes, systems, and equipment are routine and expected activities in all health care organizations, facilities, and practices.

Methods and mechanisms for reducing errors

Recent advances in the tools available to address health care errors have created more opportunities to prevent them, learn from them, and take steps to avoid their recurrence.

Mechanisms for preventing or mitigating errors—such as reminder systems, equipment alarms, and processes designed to include redundancy at critical points—are prominent features of potentially hazardous and safety-conscious industries and are attracting increasing attention in health care. Some mechanisms are designed to keep errors from occurring, while others are intended to prevent the adverse events caused by errors or to mitigate the extent of any resulting harm.

Two types of methods can help turn errors into roadmaps for quality improvement. The first is root-cause analysis, a systematic assessment of system failures and other factors contributing to an incident in which safety is compromised. The second is pattern analysis, which uses data drawn from multiple incidents to find parallels or common features among errors.

The aviation industry has been looked to as a model for health care because of its success in systematically employing these types of mechanisms and methods to increase safety. The industry's safety initiatives are multifaceted. For example, airline safety is heavily regulated by the Federal Aviation Administration. In addition, the National Transportation Safety Board plays a crucial role in investigating accidents, and commercial carriers have individually built safety-conscious corporate cultures.

Another key component of the aviation industry's efforts is the Aviation Safety Reporting System, which was launched by the industry in 1975 to encourage self-reporting of safety problems and to aid in improvement. Under this system, pilots and others who are involved in or witness an incident in which safety was compromised (so-called near misses, not actual accidents) file a report describing the incident and suggesting actions that might help to avoid recurrence. These confidential reports are used to identify deficiencies and discrepancies in aviation safety policies, to support policy formulation, and to strengthen the foundation of research on human factors affecting safety. Fines and penalties are waived for those who report infractions, providing a significant incentive for voluntary participation. The program was initially regarded as unsuccessful, but incident reporting improved dramatically once administration was transferred from the agency that had regulatory authority to penalize those responsible for errors, the Federal Aviation Administration, to an intermediary agency, the National Aeronautics and Space Administration (Birmingham 1998). The system now receives 30,000 incident reports annually.

National health care error-reduction initiatives

A number of initiatives have been formed to address health care errors, including some that are national in scope and many others at the local or provider level. Notable examples of national initiatives include those designed to provide for reporting and sharing of information, both about individual instances of error and the effects of remediation efforts. Although most are quite recent efforts, already some lessons can be drawn that are applicable to error-reduction activities Medicare might undertake.

Sentinel events policy

Since January 1995 the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) has had a policy designed to encourage health care providers to self-report certain adverse events. Under this program, known as the sentinel events policy, accredited providers may voluntarily submit information to JCAHO on the occurrence of certain types of adverse events and the results of a root-cause analysis.³ JCAHO takes steps to ensure that a root-cause analysis is conducted and that follow-up measures are taken to prevent recurrence. The organization also maintains information on the incident in its database, analyzes it to determine common underlying sources of error, and releases its findings periodically for quality improvement purposes. The program reportedly has been little used, which JCAHO attributes to two factors: the blame-oriented environment of health care delivery, which limits the extent to which incident reports are developed by providers at all; and legal concerns about the confidentiality of such information, which discourage providers from reporting information on incidents externally (O'Leary 1998).⁴

3 Reportable sentinel events under this program are those that affect recipients of health care and that have either: (1) resulted in an unanticipated death or permanent loss of function not related to the natural course of the patient's illness or underlying condition, or (2) involved suicide, infant abduction, infant discharge to the wrong family, rape, hemolytic transfusion reaction, or surgery on the wrong patient/body part. Incidents meeting the latter criterion are reportable even if the outcome was not death or major permanent loss of function. Near misses are not reportable.

4 As of December 17, 1998, only 374 sentinel events had been reported to JCAHO.

JCAHO's example seemingly affirms the theory that error reporting is unlikely to occur in an environment that penalizes those who acknowledge mistakes. The organization recently revised its policy on error reporting by providing time for the entities that report incidents to investigate them and take corrective measures. In the past, JCAHO itself would immediately conduct a review and place the facility or organization in which the sentinel event had occurred on accreditation watch.

While the former approach had the intended benefit of alerting the public to potential quality problems, it strengthened existing disincentives for reporting.

JCAHO's program also highlights the importance of confidentiality as a prerequisite to information sharing. An important reason for lack of participation in the program is believed to be the concern of health care providers that sharing their root-cause analysis findings with accreditors would strip that information of any existing state-legislated confidentiality protections. JCAHO, therefore, is seeking federal legislation to provide national guidelines for confidentiality of this type of information (O'Leary 1998).

Patient Safety Improvement Initiative

The Department of Veterans Affairs (VA) has undertaken several activities to address the problem of health care errors as part of its Patient Safety Improvement Initiative. These activities include:

- founding a working group of public and private sector organizations interested in health care error reduction, known as the National Patient Safety Partnership;

- creating a patient safety improvement awards program for health care practitioners; and

- implementing a new health care error-reduction system.

This latter system, which became effective in June 1997, is known as the Patient Safety Registry and Reporting System. Modeled after the aviation industry's safety system, it includes:

- a patient safety handbook,
- a field-to-headquarters reporting mechanism for both sentinel events and unplanned clinical occurrences (near misses),
- a requirement to conduct root-cause analyses for such incidents, and
- an interdisciplinary expert review team at headquarters that provides feedback to medical treatment facilities and disseminates information to the rest of the VA system (Leape et al. 1998).

The system is applicable to all VA and contractor hospitals, nursing homes, primary care providers, home health programs, and domiciliary care facilities.

While the VA is different from Medicare in several important ways—notably in that it undertakes health care delivery, as well as payment—its efforts provide an example of how a government health program can take affirmative steps to address health care errors. By collaborating with other stakeholders, the VA ensures that its activities will be consistent with programs and activities sponsored elsewhere. By simultaneously implementing several initiatives (for example, the error-reporting system, the awards program, and the collaborative working group), the program demonstrates its commitment to the problem and increases opportunities for success.

Medication Errors Reporting Program

The Medication Errors Reporting Program provides a mechanism by which health care providers can report medication errors or near misses (anonymously, if desired) and obtain

information about problems reported by others. The program is operated by U.S. Pharmacopeia in cooperation with the Institute for Safe Medication Practices—a nonprofit organization that works closely with health care practitioners and institutions, regulatory agencies, professional organizations, and the pharmaceutical industry to provide education about adverse drug events and their prevention. Reports submitted under this program—including those pertaining to confusion over similar looking or sounding drugs, miscalculation of dosage, and prescription errors—are shared with the Food and Drug Administration and the manufacturers of the pharmaceuticals involved. Case studies are also published to alert health care professionals about needs for practice changes and to ensure that industry and regulatory officials learn about elements of pharmaceutical labeling, packaging, or nomenclature that may foster errors.

Anesthesia Patient Safety Foundation

Health quality experts point to surgical anesthesia as the premier example of focused and successful error-reduction efforts in medicine (Leape 1994, Chassin 1998). This area of medicine may represent a natural leader in that errors in administering anesthesia—like airline crashes—tend to be transparent and knowable to others in that they can result in lasting and serious patient injuries, such as brain damage or death (Leape 1994). By using a variety of approaches, including improved patient monitoring techniques, examination of system factors that serve as a source of error, and development and use of practice guidelines, anesthesia-related deaths have been reduced to a rate of approximately 5 per million cases from a rate of between 25 and 50 per million cases in the 1970s and 1980s (Leape 1994, Chassin 1998).

The Anesthesia Patient Safety Foundation (APSF), formed in 1984 by the American Society of Anesthesiologists, has played

an important role in developing, fostering, and coordinating these efforts. The mission of the APSF is to ensure that no patient is harmed by the effects of anesthesia. The organization has sponsored research to better understand preventable anesthetic injuries, promoted programs designed to reduce the number of such injuries, and facilitated communication of information and ideas through its quarterly newsletter and other means.

National Patient Safety Foundation

The National Patient Safety Foundation (NPSF) is an independent not-for-profit organization founded in 1997 by the American Medical Association (AMA) and a broad partnership representing consumer advocates, health care providers, health product manufacturers, employers, payers, researchers, and regulators in a collaborative effort to measurably improve patient safety in the delivery of health care. The NPSF's core activities include:

- fostering research on human and organizational error and the prevention of avoidable patient injuries in health care;
- promoting the application of knowledge to enhance patient safety;
- developing information, collaborative relationships, and educational approaches that advance patient safety; and
- raising awareness and fostering communication to enhance patient safety.

The organization's research grant program made four awards in 1998. The NPSF has also organized a series of regional meetings on patient safety, conducted consumer opinion polls, held focus groups to learn about barriers to developing safety-oriented cultures in health care systems, and organized a workshop of safety experts from other industries to adapt knowledge, lessons learned, and innovative practices from other domains to health care.

Conferences on error-reduction theories and practices

Several organizations involved in patient safety work—including the American Association for the Advancement of Science, the Annenberg Center for Health Sciences, JCAHO, the NPSF, and the VA—cosponsored two multidisciplinary conferences on health care errors. The conferences, held in 1996 and 1998, provided a forum for examining and disseminating strategies for improving patient safety and reducing error.

In October 1994, the AMA, the American Nurses Association, and the American Society of Health-System Pharmacists held a conference focused on understanding and preventing so-called drug misadventures. This initiative generated recommendations for ways in which practitioners, health care institutions, health professional organizations, payers, regulators, and pharmaceutical manufacturers might foster understanding of the issues and minimize the problem. Among those recommendations endorsed by the conference's multidisciplinary panel were that hospitals should develop better systems for monitoring and reporting adverse drug events and that hospitals should approach medication errors as system failures requiring solutions (American Society of Health-System Pharmacists 1996).

leapfrog Group

A group of health care purchasers widely recognized for developing innovative, value-focused relationships with health plans and providers has formed to identify and coordinate initiatives to improve patient safety. This so-called Leapfrog Group, which includes the Pacific Business Group on Health, the Buyers Health Care Action Group, and General Motors, has identified two issues for initial focus: incorporating evidence on the relationship between service volume and outcomes in determining the appropriate site of service and promoting the installation of computerized physician order-entry systems in hospitals to reduce the incidence of medication error.

Minimizing preventable errors under Medicare

Addressing preventable errors in the care provided to Medicare beneficiaries could improve quality of care and reduce program costs. Although successful efforts would likely yield systemwide improvements in health care, some evidence suggests that Medicare beneficiaries would benefit disproportionately from them. The Harvard Medical Practice Study showed that elderly hospital patients are at a higher risk for medical injury than younger patients (Brennan et al. 1991). In fact, hospital patients age 65 or older were found to be twice as likely to suffer adverse events as those between 16 and 44. The study's authors speculated that this finding could reflect elderly patients' propensity to have more complicated illnesses that require more interventions, as well as greater fragility associated with age.

RECOMMENDATION 3A

The Secretary should establish patient **safety** as a quality improvement priority for Medicare and should take steps to minimize the incidence of preventable errors in the delivery of care provided to **beneficiaries**.

While responsibility for addressing health care errors clearly lies with the health care delivery system, Medicare, as a prudent purchaser, might encourage or facilitate concentrated efforts in this area. Because work to address health care errors is largely in its infancy, Medicare can do much to provide leadership and to demonstrate that every health system stakeholder can benefit from participating in efforts to reduce the incidence of preventable errors. In devising error-reduction initiatives, the program should conduct small-scale tests of approaches that have been developed for other industries as well as for health care before adopting approaches for programwide use. To be successful, Medicare will need to coordinate its efforts with ongoing public- and private-sector initiatives to improve patient safety.

RECOMMENDATION 3B

The Secretary should support and make use of ongoing public and private error-reduction **initiatives**—including those that promote incident reporting by providers, analysis of root causes and patterns in occurrence, and dissemination of information designed to prevent recurrence—through Medicare's policies and quality improvement activities.

Reporting incidents of preventable errors in health care delivery is unlikely to become routine practice as long as providers fear that the information they disclose can be used against them in a punitive manner. According to Leape (1994), medical incident reports are not often filed because they are perceived as punitive instruments. Further, some courts have held that incident reports are discoverable and outside the protection afforded by peer review privilege, even when such reports are prepared to improve the quality of care furnished in an individual hospital rather than for external reporting (Liang 1999). In the absence of federal law to protect the confidentiality of information on incidents of preventable health care delivery errors, providers will face powerful incentives not to report this information, which limits the ability to learn from errors and prevent recurrence.

RECOMMENDATION 3C

The Congress should enact legislation to protect the confidentiality of individually identifiable information relating to errors in health care delivery when that information is reported for quality improvement **purposes**.

Federal legislation to establish confidentiality protections for this type of information is needed to promote the

collection and use of data on incidents in which patients' safety is compromised. This type of legislation could help to promote development and use of incident-reporting systems by providers and plans, as well as participation in voluntary initiatives sponsored by private-sector accrediting bodies. It also could benefit Medicare if the program were to designate an external organization to serve as a repository for incident reporting, analysis, and dissemination of information. Such a law would neither help nor harm individual patients who are injured (compared with the status quo), but should help patients collectively by fostering the reporting of data that can be used to reduce the incidence of avoidable errors in the future.

Any steps to encourage confidential reporting of individually identifiable information raise concerns about patient privacy that must be addressed simultaneously. Numerous efforts are under way to resolve concerns about the appropriate use of individually identifiable health and medical data; however, resolving those concerns to the satisfaction of all stakeholders has proved challenging.

Medicare's policies for addressing errors and adverse events

At present, Medicare does little to influence the incidence of errors in the care provided to program beneficiaries. The program relies largely on systems established by the medical profession and private-sector accrediting bodies to provide channels of accountability for health care providers, organizations, and facilities. In this respect, Medicare is not unlike most health care purchasers, both public and private.

Medicare's contractors for quality assurance and improvement activities, the

state-based quality improvement organizations (QIOs), are responsible for handling Medicare's quality-related complaints, including those from patients and practitioners.⁵ However, individual providers or beneficiaries have no **affirmative** duty to report complaints, safety concerns, or adverse events. QIOs that receive information about an adverse event or error investigate the incident and use administrative databases and hospitals' medical records to determine whether a pattern of similar cases exists. Under their present arrangements with the Health Care Financing Administration (HCFA), the organizations focus primarily on identifying opportunities for improving quality from a population perspective, rather than on specific instances of substandard care provided in a particular incident.

Medicare also requires that providers adhere to the program's conditions of participation (COPs) in order to be eligible for payment, and that participating plans adhere to Medicare+Choice program rules. Medicare's rules generally require health plans and health care facilities to maintain ongoing internal quality assurance systems designed to actively identify, investigate, and resolve quality problems. Medicare currently has little ability to evaluate the effectiveness of those required internal quality assurance systems. Instead, the program prescribes and assesses certain structural and procedural elements of those systems that are believed to enable them to be effective in ensuring and improving the quality of care.

⁵ The organizations now prefer to be called quality improvement organizations because they believe this appellation denotes the scope and orientation of their current responsibilities better than does the term used in statute and by the Health Care Financing Administration: peer review organizations.

Harnessing Medicare's tools for addressing errors

Medicare has a wide range of policy levers that it could employ in new initiatives or refocused efforts to reduce errors in health care. Some are more appropriately used to address specific, targeted care delivery issues, while other, blunter levers might be used to draw resources and attention of the health care community to the issue of errors.

RECOMMENDATION 3D

The Secretary should consider opportunities for minimizing avoidable errors in health care delivery through coverage and payment policies, quality measurement initiatives, and quality improvement programs.

Coverage and payment policy

Decisions about what is paid for and how to pay are among Medicare's most powerful tools for influencing care. Coverage decisions stand to affect error rates when new technologies for diagnosing or treating illness could help to reduce opportunities for mistakes. Although Medicare's current payment formulas do not account for errors or other dimensions of health care quality, in the future, payment might be used to provide incentives for health care organizations and providers to invest in systems designed to minimize opportunities for unchecked human error or to identify errors that are systemic in origin.

Quality measurement for public reporting

By choosing which performance data to collect and publicize, Medicare has considerable power to influence where health care providers will concentrate their resources and attention. The Medicare HEDIS reporting requirements

represent the clinical and nonclinical areas for which health plans are accountable to HCFA for their performance.⁶ The measures of health care quality included in the reporting requirements are ones for which better documentation and reporting will yield better scores, such as flu shot and diabetic eye exam rates. HCFA could conceivably choose to require measurement and reporting of error rates, but doing so would create substantial disincentives for accurate and complete data documentation. Instead, the agency might focus on developing and using performance measures designed to assess the extent to which providers are taking steps to address errors. Doing so could provide beneficiaries with a basis for differentiating plans' and providers' efforts without penalizing those who acknowledge error.

Quality improvement programs

By designating specific clinical and nonclinical areas for health care quality improvement, Medicare can influence which areas will be subject to the focused improvement efforts of health care providers and plans. Medicare's quality improvement organizations are accountable to HCFA for demonstrating net quality improvement in these specified areas at the state level. QIOs typically use tools such as provider profiling, feedback, and education in their efforts to bring about changes in health care delivery.

RECOMMENDATION 3E

The Secretary should work with providers and other stakeholders to identify and promote **effective** and efficient processes, structures, and activities for reducing preventable errors and to set **progressive** targets for improvement in patient safety through Medicare's quality improvement programs.

MedPAC supports defining and regularly updating numerical targets for improving patient safety. Through this approach, Medicare could establish a nonpunitive environment for improvement while sending the message to beneficiaries that the program is committed to continual advancements in safety. To increase the likelihood of effectiveness, however, implementing such an approach in Medicare would require legislative authorization to establish improvement incentives (financial or otherwise) geared toward health care providers. The current system lacks mechanisms by which the program can hold providers directly accountable for improving their performance.⁷

In addition to targeting specific types of health care errors through the QIOs, Medicare might also implement an error-reporting system as a new tool for health care quality improvement. Under such a system, the QIOs could be called on to:

- collect information reported by providers on errors that result in adverse events or potential events, including an analysis of the factors contributing to the errors;
- analyze reported information to identify patterns or common themes; and
- disseminate information obtained through the analyses to help providers identify changes in processes or other steps necessary to avoid recurrence.

One important factor predicting the success of such a program would be providers' willingness to report complete and accurate information on errors to the QIOs. In past years, QIOs have undergone a dramatic transformation in terms of their role and activities, moving

⁶ HEDIS, the Health Plan Employer Data and Information Set, is a set of widely used measures of health care quality and health plan performance promulgated by the National Committee for Quality Assurance.

⁷ The Commission recommends that the Congress provide legislative authority to test use of performance incentives under Medicare. See Chapter 2.

RECOMMENDATION 3F

The Secretary should not establish requirements that specify maximum tolerance rates of errors in health care delivery under Medicare's conditions of participation for health care providers.

Medicare's program participation requirements could address health care errors in at least two alternative ways: by specifying maximum error rates or by specifying required structures, process, or activities to be used to address errors. The Commission finds the first approach to be overly prescriptive and not in keeping with Medicare's objective of promoting constant improvement in the quality of care beneficiaries obtain. However, to the extent that certain structures, processes, or activities have been identified as effective and efficient, MedPAC supports including requirements for their use in conditions of participation for providers and in program participation rules for health plans.

Addressing medication errors in Medicare

A recent national study suggested that medication errors are on the rise, with the total number of related deaths more than doubling between 1983 and 1993 (Phillips et al., 1998). This rise may be associated with increasing complexity in drug ordering, the proliferation of new drugs, and the expanding role of pharmaceuticals in patient care.

Studies suggest that taking steps to avoid preventable adverse drug reactions offers hospitals the potential to achieve considerable savings, making prevention of medication errors an attractive quality improvement goal in a time of constrained resources. One recent study estimated the annual costs of preventable ADEs at \$2.8 million in each of two teaching hospitals, out of an

from punitively oriented retrospective case review to a more collegial mode as a quality improvement resource and partner to health care providers. Technically, however, QIOs retain some role in identifying and reporting to HCFA on specific quality problems. As the aviation industry's experience demonstrates, this policing function may affect the willingness of providers and health plans to report errors to QIOs. The QIOs do have the advantage of statutory protection from having to release information pursuant to their quality activities, however, allowing them to ensure confidentiality to providers who might otherwise harbor liability concerns about sharing adverse information.⁸ Federal law also provides this type of protection for providers who disclose information to the QIOs, although some have raised questions about the extent of providers' awareness that they have this protection.

Potential limitations on national use of data also raise questions about the potential role of QIOs in an error-reporting program. Stringent legal restrictions on how the organizations use individually identifiable (including provider-specific) information curtails the extent to which the groups can share information with each other or pool data in a common repository for quality improvement purposes. Because QIOs and HCFA are now preparing to implement new contractual requirements to conduct national quality improvement projects, the agency and its contractors are working to find out to what extent and how data sharing might be possible.

Other issues associated with crafting a formal error-reporting system for Medicare include developing reporting incentives, establishing accountability for reporting, and disseminating information to support error-reduction activities. The program's own fraud and abuse initiative—under which those who detect

problems, self-report, and institute steps to avoid future recurrence can avoid penalties—may provide a model for creating reporting incentives. Those guilty of defrauding the program face potential fines and legal penalties, the threat of which can make clemency an attractive incentive for self-reporting of mistakes. A comparable, credible threat for failing to report errors would have to be established, presumably a fine or other penalty. Accountability for reporting errors might be modeled after the aviation industry's safety system, requiring anyone with relevant knowledge to make a report in cases where errors occur. Alternatively, the burden of accountability might appropriately rest with the facility or plan associated with the incident. Furthermore, medical professional societies and industry groups might play a role in disseminating information by working with QIOs to inform their membership about various patterns of error or safety issues identified through an analysis of reported error data.

Program participation requirements

Medicare's participation requirements are important because they serve as HCFA's primary vehicle for making substantive requirements of health care providers and plans, but they are limited in important respects. They are not easily changed to accommodate new quality improvement goals. They also are infrequently updated, in part because of the extensive rulemaking process that HCFA must adhere to in promulgating these standards.⁹ This characteristically slow process is designed to facilitate input from all stakeholders and interested parties, but it may result in standards that are outdated or otherwise out of step with comparable private-sector norms.

8 Quality review study information with patient identifiers is not subject to subpoena or discovery in a civil action, including an administrative, judicial, or arbitration proceeding (42 CFR § 476.140).

9 For example, HCFA proposed new conditions of participation for hospitals in a notice published in the December 19, 1997, Federal Register. Because the agency is still reviewing over 61,000 comments received on this proposal, no publication date for the final rule has been announced. The standards were most recently updated in 1986, following a six-year public comment review process.

estimated total of \$5.6 million per hospital in total expenditures due to ADEs (Bates et al. 1997). These estimates represent only the costs of additional patient care in the hospital, not hospital expenses associated with litigating cases and remunerating injured patients. They also do not account for costs directly borne by injured patients.

Order-entry systems offer potential to reduce medication errors

Studies have shown that improving the systems for ordering and administering drugs in hospitals can successfully prevent many ADEs from occurring (Leape et al. 1995). Given the need for continual system refinement and variation in development and implementation costs, it is difficult to determine whether computerized systems designed to prevent ADEs are cost effective for individual hospitals, although they are much more likely to be so if patient and social costs are factored into the analysis.

Some hospitals have now installed computerized systems that display warnings in cases of drug interactions, known drug allergies, or incorrect dosages in response to medication orders entered by physicians. A computerized order-entry system used in one large tertiary care hospital was shown to decrease the rate of serious medication errors by more than half, resulting in savings to the hospital of an estimated \$480,000 annually in direct patient-care costs (Bates et al. 1998). Another such system detected opportunities to reduce ADE-related injury at a rate of 64 per 1,000 patient admissions (Raschke et al. 1998). Yet another program, designed to assist physicians in prescribing antibiotics, decreased mortality among patients treated with antibiotics by 27 percent while substantially reducing both antibiotic costs per patient treated and overall antibiotic acquisition costs (Pestotnik et al. 1996).

But considerable investments may be required if all hospitals are to develop the capacity to implement and operate such systems. Prerequisites for a computer ADE alert system generally include:

- an integrated computerized database that includes clinical, pharmacy, and laboratory data;
- the ability to program the system to generate alerts when opportunities to prevent injury occur; and
- reliable clinical systems for physician notification (Raschke et al. 1998).

Developing, instituting, and operating computerized systems designed to reduce medication errors can be costly. While costs will vary depending on institution size, system design factors, extent of need for health data system development, and ability to replicate existing systems, one group responsible for developing and implementing such a system recently reported a range for development costs of anywhere between several hundred thousand and several million dollars (Raschke et al. 1998).¹⁰ Development of another system was estimated to cost \$1.9 million, with maintenance costs of \$500,000 per year (Bates et al. 1998).

Medication-error policy options for Medicare

Although Medicare might consider a number of approaches to encourage hospitals to reduce medication errors, all options present operational challenges. Prominent among the policy changes Medicare might make are:

- changing the conditions of hospital participation, and
- creating additional incentives for hospitals to reduce medication error rates.

Other options include promoting medication-error reduction efforts through the quality improvement projects sponsored by Medicare's QIOs.

Conditions of participation Medicare's conditions of participation for skilled nursing facilities and proposed new COPs for hospitals both include requirements relating to medication errors. Medicare's COPs require long-term care facilities to ensure that residents are free of any significant medication errors and that the overall medication error rate is under 5 percent. HCFA proposed adopting similar requirements for hospitals in new and revised Medicare COPs published in December 1997. Under the proposed COPs, hospitals participating in Medicare would not be permitted to exceed a medication error rate of 2 percent and would be required to establish a "zero tolerance" policy for "significant" medication errors. These changes to the COPs reflect HCFA's initiative to replace requirements that prescribe systems and procedures with new standards focusing on the results of care provided to patients (HCFA 1997).

MedPAC joins others in opposing HCFA's proposed standards for medication errors in hospitals and calls for the agency to retract similar standards now in place for skilled nursing facilities. The American Society of Health-System Pharmacists, the JCAHO, the American Hospital Association, and other organizations criticizing HCFA's proposed hospital standards have raised questions about the specific rate designated-in that it appears to be lower than that achieved by the best performers in the industry-and the potential effectiveness of setting an overall error rate as a way of reducing ADEs. Critics have also noted that the standards could create the impression that HCFA implicitly sanctions a certain level of errors, a notion seemingly at odds with consumer expectations of fail-safe, error-free hospital care and the aim of public policy (Manasse et al. 1998).

10 Radiology technicians responded to alerts designed to prevent radiocontrast media nephrotoxicity.

A group of prominent proponents of health care safety has suggested an alternative to HCFA's approach to addressing medication errors (Manasse et al. 1998). The group called for HCFA to require each hospital to establish and conduct an active, interdisciplinary quality improvement program focused on preventing and eliminating medication error that includes:

- a standard definition of medication error;
- an ongoing process for measuring medication errors, following up on their root causes, and instituting safety mechanisms to eliminate repeat incidents;
- a periodic analysis of the safety of medication use, coupled with education and training of staff;
- identification of the most hazardous aspects of hospital medication use and systematic efforts to reduce those hazards; and
- reporting of serious medication errors to existing, voluntary national reporting programs.

The pharmacy profession also has developed guidelines and standards of practice that address the prevention of medication errors, including approaches that health systems can use to develop systems for preventing errors and for managing errors that have occurred (American Society of Hospital Pharmacists 1993). Given the early state of developing and instituting systems and processes for reducing error, the Commission believes that process-oriented standards such as these represent a more appropriate way of addressing medication error in Medicare's conditions of participation.

Financial incentives Given the potential for significant benefits to beneficiaries and to the program by reducing medication errors, Medicare might establish financial incentives to encourage hospitals' efforts. This approach offers the advantage of

rewarding quality improvement, not often seen in a regulatory environment.

Incentives to reduce medication error might be created in several different ways. For example, Medicare might explicitly subsidize a portion of hospital investments in computerized ordering systems, although this option risks a high likelihood of administrative burdens and delays associated with such factors as defining eligible systems and overseeing the appropriate use of the funds. The indirect approach of offering financial rewards or bonuses to hospitals that reduce error rates or achieve established thresholds avoids the drawbacks of the subsidy option but presents its own operational challenges, including problems associated with defining errors adequately, ensuring accurate reporting, and setting appropriate target rates.

Increasing autopsies to identify and learn from errors

Increased use of autopsies, together with improved collection and use of information derived from the procedure, could be instrumental in systematic efforts to reduce errors. Despite seeming consensus among the medical community and other stakeholders that autopsies have great value for public health and health care quality, use of the procedure is waning and use of the information derived from those performed is limited.

Medicare interventions in autopsy use are justified both by the historic role the program has played in financing health-related costs of general benefit to society and by the program's interest in beneficiary care: beneficiaries currently represent about three-fourths of all hospital deaths, and information gleaned from autopsies could benefit that population's care significantly.

The Commission believes that information derived from autopsies offers significant potential for use in efforts to reduce errors and improve quality. More

information is needed, however, to determine the steps Medicare should take to promote use of autopsies and the information they provide.

RECOMMENDATION 3G

The Secretary should fund research to study appropriate use of autopsies and to evaluate approaches for using information derived from autopsies in health care quality improvement and error-reduction initiatives.

Autopsies can yield multiple benefits

Purported benefits of autopsies have often been cited. Autopsies can be a tool for learning, playing a role in the advancement of medicine as a whole, the training of medical students, and the continuing education of physicians. They provide a means of determining diagnostic accuracy and can serve an important role in quality control.

Researchers have noted that autopsy findings contributed to important medical breakthroughs in understanding diseases such as AIDS and Alzheimer's disease (Lundberg 1998). Autopsies can assist in evaluating the effectiveness of new drugs and treatments. They also can provide family members of the deceased with important information about hereditary diseases. Furthermore, they can help to improve the accuracy of public health statistics by providing a way to detect previously undiagnosed disease.

Determining the appropriate use of autopsy is hampered, however, by a lack of systematic documentation and quantification of autopsy benefits. Numerous experts have called for data collection and analysis designed to develop cost-benefit ratios and for prospective, controlled research designed to document the benefits of autopsies (Marwick 1995, Hill 1996). Without such evidence, it is difficult to set meaningful, objective standards for appropriate use. Furthermore, in an era when new tools for assessing and improving quality are continually becoming available, autopsies may be held to a higher test of value (O'Leary 1996).

Insufficient use of information from autopsies

Numerous observers have commented on the need to do more to ensure that autopsy data become usable information and that this information is used systematically to improve health care. Current variations in data handling and communication procedures—such as the proliferation of different forms for obtaining consent for autopsy and reporting autopsy results—present barriers to doing so (Hill 1996). The Institute of Medicine's Health Sciences Policy Board identified several issues needing further investigation, including the collection and reporting of autopsy data and sharing and use of information derived from autopsies beyond the practice of pathology (Setlow 1996).

Autopsy rates declining

While the ideal autopsy rate is unknown, numerous experts have suggested that current rates, which have been dropping steadily over time, are insufficient.¹¹ Because of problems in reporting data, exact rates are difficult to pinpoint, but autopsy rates generally have fallen from an estimated 50 percent of hospital deaths in the 1960s to recent averages of approximately 10 percent to 20 percent in teaching hospitals and 5 percent in other community-based hospitals (Marwick 1995). Many hospitals have autopsy rates at or near zero (Lundberg 1998). Data from the Centers for Disease Control and Prevention (CDC) illustrate the continuing decline in the percentage of deaths for which autopsies were reported. In 1990, the percentage was 11.2, but it had dropped to 9.4 percent by 1994 (CDC 1999).¹²

Determining appropriate autopsy rates requires considering the numerous potential uses for information from autopsies. Sampling statisticians could

determine an appropriate autopsy rate to monitor errors in health care delivery based on the estimated frequencies of various types of errors. Such rates might in turn be augmented to support other information-seeking purposes. Medical professional societies have developed guidelines defining the circumstances under which stakeholders could reasonably expect an autopsy to uncover additional information of value.¹³

Reasons for declining autopsy rates

Industry observers, analysts, and the media have reported many reasons for the dramatic decline in autopsy rates. Surveys of Chicago-area hospitals conducted by the Institute of Medicine of Chicago in 1993 and 1994 found four primary reasons for the decrease autopsies (Hastings and Andes 1997):

- lack of direct reimbursement;
- retraction of defined industry standards for minimum autopsy rates;
- fear of inducing litigation, including malpractice suits; and
- technological improvements in diagnostic techniques that provide ways of obtaining information comparable to that provided by autopsies.

Other industry observers have advanced other theories that may help to explain the autopsy's decline. For instance, a study that yielded data from in-depth interviews with hospital pathologists over a 30-year period suggests that the role of chief pathologists has changed, with an increasing proportion of their time devoted to duties other than autopsies, notably laboratory work (Hastings and Andes 1997). The College of American

Pathologists asserts that many hospitals do not provide state-of-the-art facilities and technology for the autopsy and that many hospital autopsy suites do not have adequate environmental engineering to protect staff from pathogens (Wood 1999). Others have suggested that eroding relationships—between physicians and patients, and in families increasingly separated by distance or other factors—have contributed to decreased autopsy rates by reducing the willingness to request or grant permission for autopsy.

Payment Because health insurers tend to pay for autopsies either indirectly or not at all, hospitals generally do not have financial incentives to supply them. Insurers reportedly fail to cover autopsies for several reasons:

- they are not a health care service performed to improve the health or functioning of a patient,
- health plan membership and insurance benefits normally cease upon death, and
- other types of payments to hospitals are presumed to include hospital autopsy costs and other overhead expenses (Chemof 1996, Marwick 1995).

Medicare pays hospitals for autopsies indirectly, considering them an allowable cost associated with hospital administration and quality control rather than a patient care service. The program's payment for autopsies is included in an unidentifiable amount in the diagnosis related group payment to the hospital.

Like hospitals, pathologists also often lack direct financial incentives to perform autopsies. Because autopsies are not a covered service under Part B,

11 An informal poll of autopsy conference attendees revealed widespread support for a rate of 20 to 25 percent of hospital deaths, although this result likely reflects the historical precedent of these rates as performance standards (Hill 1996).

12 The CDC stopped collecting data on autopsy provision in 1995, in part because the statistics, collected through death certificates, were known to be unreliable.

13 The College of American Pathologists, for example, has issued guidelines for determining which cases of hospital death warrant seeking permission for autopsy, including all obstetric, perinatal, and pediatric deaths, as well as deaths in which the cause is not known with certainty on clinical grounds (College of American Pathologists 1997). Other groups also have endorsed these guidelines (American Society of Clinical Pathologists 1997).

Medicare does not pay physicians for performing them. Instead, pathologists negotiate payment with hospitals for those services considered to be provided to the hospital, rather than to an individual patient.¹⁴ According to the American Society of Clinical Pathologists, hospitals' arrangements for paying pathologists vary (Linder 1998). Some hospitals pay a flat fee that encompasses designated pathology services (such as providing autopsies, serving on committees, and overseeing laboratory services). Others budget for a certain number of autopsies to be performed annually and pay the pathologist a prospective amount based on the budget assumption. In some cases, pathologists work for hospitals under a fee-for-service arrangement.

Standards The lack of accountability for performing autopsies under current public- and private-sector requirements for hospitals is another factor often cited as contributing to the decline in autopsies. Medicare's current hospital conditions of participation do not specify minimum autopsy rates; previously required minimum rates were eliminated in 1986, when the standards last were updated. JCAHO, a private-sector accrediting body, dropped its standards for hospital autopsy rates—20 percent for community hospitals, 25 percent for teaching hospitals—in 1970 (O'Leary 1996).¹⁵

Some standards prescribing hospital autopsy rates remain in effect, although there is evidence they are not widely followed. Data from the Residency Review Committee for Internal Medicine show that 51 percent of the 386 internal medicine residency programs reviewed for accreditation from January 1991 to May 1994 were cited for failing to conduct autopsies on at least 15 percent of deaths, as required (Schatz 1995). The potential for adverse accreditation status

resulting from failure to meet the standard apparently was insufficient to attain compliance.

Other accreditation standards and Medicare participation requirements address autopsy performance without specifying rates. JCAHO's current standards require that hospitals establish criteria for appropriate use of autopsies, ensure medical record notation of efforts to obtain permission for autopsy when the procedure is indicated, and use findings from autopsies in quality assurance activities. Under Medicare's current requirements, hospital medical staff must attempt to secure autopsies in unusual deaths or deaths of medical, legal, or educational interest; hospitals must define the mechanism used to document permission to perform an autopsy; and hospitals must have a system for notifying the medical staff generally, and the attending practitioner specifically, when an autopsy is performed.

Medical advancements Some medical professionals believe that advancements in diagnostic ability have made the autopsy obsolete, although others have refuted that notion. Consistent evidence of discord between pre- and post-mortem diagnoses in studies conducted over most of this century has been cited as evidence that technological advancements have eliminated neither the ability to gain valuable information through the autopsy nor the need to do so (Lundberg 1998).

liability considerations To the extent that health care professionals believe autopsies are likely to uncover mistakes in health care delivery, hospitals and physicians may avoid autopsies because of concerns about the potential to incite or support malpractice charges. An October 1998 broadcast of the news program *60 Minutes* reported that some hospitals seemingly act on liability concerns by employing risk managers who advise families of deceased patients

against requesting an autopsy (CBS 1998). Some experts in the professional liability industry suggest fears of autopsies are unfounded, and that, in fact, autopsy often strengthens a physician's defense (Wood 1998).

Policy options for promoting appropriate use of autopsies

Medicare policymakers should consider changing the hospital conditions of participation, revising payment mechanisms, or taking other steps to promote autopsy use. Quality and performance measurement initiatives offer the potential to direct resources and attention to appropriate autopsy use, particularly if implemented with other actions. Because many factors seem to have contributed to autopsy decline, a single intervention might be insufficient unless it can stimulate other changes in the industry.

As a health care purchaser, Medicare is more directly positioned to promote increased use of autopsies than to ensure better use of the information they provide, although the latter step is crucial if autopsies' full potential is to be realized. Steps by Medicare to increase the utility of the service as a quality improvement tool might be considered. For instance, HCFA might require standard protocols for classifying unexpected autopsy findings and formally feeding back those findings to hospitals' quality assurance programs. Alternatively, HCFA might require that hospitals report such data to the program's QIOs for use in focused quality improvement initiatives. The medical profession and other interested parties must meet the challenge of taking the necessary next steps to ensure appropriate information use, however.

14 Pathologists have expressed concerns about their ability to negotiate reasonable payments from hospitals for the services they provide to the hospital (such as laboratory management or autopsy performance) that are covered under Medicare Part A, but not Part B.

15 JCAHO originally intended these rates to be guidelines for hospitals, but examining boards in medical specialties, hospitals, and practicing physicians interpreted them as mandatory.

Change conditions of participation
Whether to reinstitute minimum autopsy rates in Medicare's conditions of participation has been the subject of heated debate. If Medicare were to do so, as some autopsy advocates have proposed, the agency might attempt to address some of the concerns that led JCAHO to eliminate its former standards and that presumably also factored into HCFA's subsequent retraction. Among the concerns were that:

- the standards did not necessarily represent the appropriate rates for all hospitals;
- hospitals undertook autopsies unselectively to meet the minimum requirements; and
- the standards failed to consider appropriate differences in autopsy use among various divisions within hospitals (O'Leary 1996).

To address these concerns, new COPS might provide greater flexibility for unusual circumstances, allowing hospitals to justify deviations from established standards when patient case-mix or hospital orientation warrant. HCFA also might consider allowing outsourcing autopsy services when hospitals lack capacity to conduct autopsies on site.

Medicare might strengthen hospital COPS relating to autopsy use without specifying minimum rates. Examples of potential changes include hospital autopsy policies suggested by the American Society of Clinical Pathologists (1997), namely:

- instituting an Office of Decedent Affairs or equivalent to help hospital staff and patients' families cope with death in the hospital, to prepare families for the autopsy request, and to institute methods for improving the autopsy consent rate;

- developing an informational pamphlet for the family members of deceased patients that describes the autopsy procedure and its value; and
- conducting in-service programs for nurses and social workers to ensure that these personnel help to obtain autopsy consents.

Reconfigure payment arrangements
Interested parties assert that promoting adequate autopsy use will require changing payment arrangements, irrespective of other steps taken. The College of American Pathologists states that without such change, calling for more autopsies will only frustrate pathologists, other physicians, hospitals, and institutional administrators (Bauer 1994).

Medicare might consider at least two types of payment changes. First, Medicare could pay pathologists directly for the autopsies they perform by making autopsy a Medicare-covered service, reimbursed under the physician fee schedule. Such a change would appear to make autopsy unique among the program's covered services in that it is not undertaken for the medical benefit of a patient. Second, Medicare might make bonus payments to hospitals that achieve target autopsy rates, an approach that raises different questions, such as whether to impose financial penalties on hospitals that fail to improve autopsy use and whether to introduce other types of performance-based payments.

Costs to Medicare of changing autopsy payment arrangements will depend on several factors, including the level of reimbursement and extent of use. Hospitals' costs and physician work associated with autopsy performance are believed to range widely, depending on the comprehensiveness of the autopsy and the extent to which ancillary diagnostic procedures are required. Fixed costs also vary by hospital, in that many autopsy suites require upgrading to meet recently revised occupational health standards for infectious disease protection. At present, inadequate data

exist to assess the costs to Medicare of making direct payments to pathologists for autopsies.

Make autopsies a quality improvement focus
Medicare's quality improvement programs offer another avenue for promoting appropriate autopsy use. Medicare could identify increased use of autopsies as one of its quality improvement goals, thereby requiring quality improvement organizations to develop and run improvement projects focused on autopsy use. This approach would create meaningful incentives for QIOs, because under the most recent contractual arrangements, HCFA now holds QIOs accountable for demonstrating improvement. It is not clear, however, that QIOs have sufficient leverage with providers to adequately address or overcome the underlying reasons for the decline in autopsy rates.

incorporate autopsy standards into performance measurement activities
Although not an immediately viable option, in the future Medicare might use its new performance measurement systems to attain accountability for appropriate autopsy use. Doing so would require defining appropriate performance measures for autopsy use and incorporating those measures in a performance measurement and reporting system for hospitals.

Some developments in this area may be forthcoming. At the behest of the College of American Pathologists, the AMA's board of trustees recently referred a resolution encouraging use of autopsies in performance measurement and quality improvement activities to the Performance Measurement Coordinating Council, a group designed to coordinate the quality measurement activities of three leaders in the accreditation industry: the JCAHO, the National Committee for Quality Assurance, and the AMA (Wood 1998). ■

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C H A P T E R

4

Structuring informed beneficiary choice

R E C O M M E N D A T I O N S

4A The Congress should allow HCFA more administrative flexibility in meeting its obligations to inform beneficiaries by relaxing legislative requirements pertaining to content of consumer information materials and means of dissemination.

.....

4B The Congress should fund HCFA's education initiatives adequately and directly through the appropriations process rather than through assessing user fees on Medicare+Choice organizations.

.....

4C The Secretary should develop and evaluate interactive tools that give beneficiaries a framework for understanding their choices and that help them to process information.

.....

4D The Secretary should define and regularly update appropriate standard terms for describing Medicare coverage options. HCFA should use these terms in its informational materials, require their use by Medicare+Choice organizations, and encourage their use by medigap policy carriers and others who provide beneficiary information.

.....

4E The Secretary should study the enrollment patterns of beneficiaries, giving particular attention to vulnerable groups, to assess whether their informational needs are adequately met.

.....

4F The Secretary should monitor the prevalence of aggressive marketing techniques or abuses, especially toward vulnerable populations, such as frail beneficiaries and those without functional literacy.

Structuring informed beneficiary choice

In the first year of the Medicare+Choice program, HCFA began to meet its congressionally mandated responsibilities to educate and inform Medicare beneficiaries about their insurance options. Although the first nationwide information campaign is set for fall 1999, early evidence reveals many challenges, including low levels of understanding and familiarity with core concepts among beneficiaries, problems with beneficiaries' use of detailed written materials, and beneficiary confusion resulting from misinformation and lack of coordination among information providers. HCFA must modify its initiatives to address these concerns and to incorporate new understanding of beneficiaries' information needs and ways to address those needs. To do so, the agency requires more administrative flexibility and a reliable source of adequate funding.

In this chapter

- Objectives of the informed choice initiative
 - First steps in promoting informed choice in Medicare
 - Helping beneficiaries make informed choices over the long term
-

Enactment of the Medicare+Choice program paved the way for new types of private health plans to participate in Medicare. These plans could enhance Medicare beneficiaries' satisfaction with the program by offering them the combination of premiums, benefits, and cost sharing they want and can afford. They also could lead to improvements in health care quality and reduced costs if health plans begin to compete on value. For these improvements to happen, however, beneficiaries must have information about the choices they face and they-r people acting on their behalf-must use that information to make enrollment decisions that reflect their preferences. Providing that information and facilitating its use are particular challenges in Medicare, given the program's size and the diversity of the beneficiary population.

This chapter first examines the objectives of efforts to help Medicare beneficiaries make informed enrollment decisions. It then reviews initial steps taken toward meeting these objectives, describing the provisions of the Balanced Budget Act of 1997 (BBA) that relate to disseminating and disclosing Medicare+Choice information, reviewing the status of initiatives by the Health Care Financing Administration (HCFA) to educate and inform beneficiaries about their new options, and identifying short-term fixes needed to address fundamental problems that limit opportunities for future success. The chapter then looks ahead to what will be needed if the informed choice initiative is to succeed in the long run. It describes the conditions under which the initiative's objectives will be met, assesses the progress in doing so, and identifies ways to increase the likelihood of fulfilling those conditions.

The analysis draws upon:

- research on health care decisionmaking;
- data describing characteristics of the beneficiary population;
- lessons from the reform of the medigap insurance market under the Omnibus Budget Reconciliation Act (OBRA) of 1990; and
- lessons from the Nutrition Labeling and Education Act (NLEA) of 1990.

The analysis also incorporates the contributions of a panel of experts the Medicare Payment Advisory Commission (MedPAC) convened to discuss structuring informed beneficiary choice.¹ Panelists provided information and insights on first-year field experience with HCFA's information campaign, current research studies, models for structuring informed choice, and private consumer assistance initiatives.

Based on this analysis, MedPAC makes recommendations for improving efforts to help Medicare beneficiaries become more informed about their coverage options. The Commission recommends that the Congress take steps now to support informed beneficiary choice by providing the Secretary with the administrative flexibility to increase understanding of beneficiaries' information needs and an improved funding mechanism for the annual information campaign. MedPAC also recommends the Secretary take steps to build the infrastructure needed to foster informed decisionmaking by developing tools to help beneficiaries use information and standard terms to increase comparability and by ensuring adequate consumer protection for vulnerable beneficiaries.

Objectives of the informed choice initiative

Efforts to help Medicare beneficiaries make informed decisions on enrollment have two underlying objectives: improving beneficiaries' satisfaction and increasing the value of the health care they obtain. Meeting these objectives will require addressing a number of challenges.

Facilitating informed choice to improve consumer satisfaction

One objective of helping Medicare beneficiaries make informed enrollment decisions is to foster a higher level of satisfaction with health care and better health outcomes. Research suggests that consumers appreciate having options and access to information that allows them to evaluate those options (Sofaer et al. 1993). Consumers who are more informed in the selection of their health plans tend to have lower initial disenrollment rates and higher levels of overall satisfaction, in part because those who make informed enrollment decisions are more likely to have realistic expectations of their plans (Mechanic 1989). Improved health status also may result from informed decisions if individuals select the coverage and ultimately obtain the care that best meets their particular health care needs (Sangl and Wolf 1996).²

Informed choice as a means of increasing value

Another objective of the beneficiary information initiative is to increase the value-or the quality-to-cost ratio-of the health care that beneficiaries obtain. This objective reflects the expectation that developing and disseminating easily used information about health care quality and health plan performance will spur value-based competition among plans participating in Medicare.

1 MedPAC convened the panel on February 19, 1999. Members represented perspectives of consumer assistance groups, Medicare+Choice plans, employers, unions, and researchers.

2 Better information might have undesirable results if beneficiaries with certain types of illnesses or health concerns tend to enroll in particular plans because of the coverage they provide or the quality of care they furnish. For this reason, adequate risk adjustment of payments to plans is critical to account for the effects of any beneficiary self-selection that does occur.

Such competition might be increased in any of several ways. The first way is for beneficiaries to consider value in making their enrollment decisions, thereby rewarding those plans that provide the preferred balance of quality and costs. Another way to induce competition is if a critical mass of purchasers considers quality in making contracting decisions. Finally, physicians and other health care providers also can spur value-based competition by considering information on quality when deciding which plans to participate in or to recommend to their patients.

Value-based competition among health plans is still a theory, rather than a reality, in most markets. In California, where competition among managed care plans is relatively high and consumers have access to an array of information on quality, technical quality of care may have improved (Sisk 1998). However, concerns exist with both the incentives and the ability of managed care plans to differentiate themselves on quality. One factor is the lack of tangible rewards in many markets for doing well on measures of quality and performance, because few consumers or purchasers now use those measures in their decisionmaking. Another factor is plans' constrained ability to contract selectively with physicians and providers—an important way plans can improve and monitor quality. This constraint results from a combination of “any willing provider” laws in certain states and purchasers' and consumers' demand for broad choice of providers (Berenson 1998).

Consumer pressures to improve the value of health care

Value-based competition does not require universal use of information on quality and performance. A critical mass of knowledgeable beneficiaries who demand better value would induce health plans to improve the value of their products.

At present, however, most consumers do not find information on the quality of health care and the performance of health plans essential when selecting their health plans (Hibbard 1997). Some consumers do not find plan-level information on quality of care relevant to their enrollment decisions because they believe that health care providers are much more influential than health plans in determining quality. Others are confused by this information or are not aware that it is available.

Consumers may understand the importance of this information better through improved consumer education, more familiarity, and improvements in presenting information. One survey of more than 5,000 employees of Fortune 500 companies enrolled in managed care plans found employees were more likely to select plans with better scores in preventive care measures (such as immunization rates and mammography screening rates), suggesting some level of consumer interest in this information (Chemew and Scanlon 1998).

Purchasers' use of quality information and value-based competition

Although purchasers could be instrumental in promoting value-based competition among plans, value-based purchasing is not yet common. According to a recent study, only a few large private employers use information on quality to make contracting decisions and to monitor and screen plan performance (GAO 1998). Moreover, an annual national survey of employers with more than 200 employees found that accreditation of health plans and performance data play a growing but relatively minor role in employers' decisions to select among health plans (Gabel 1998). According to this study, only 9 percent of surveyed employers required accreditation by the National Committee for Quality Assurance

(NCQA) and about 1 percent provided HEDIS data to help employees select plans.³

Decisions by purchasers that represent a large portion of the market have the potential to spur value-based competition most directly, but public purchasers such as Medicare face other constraints that may limit their ability to act on information on quality and performance (see Chapter 2).

Health care providers' use of information on quality

Physicians and other health care providers are an important potential audience for comparative information and could play a role in spurring value-based competition. Since 1991, the Pennsylvania Consumer Guide to Coronary Artery Bypass Graft (CABG) Surgery, has provided risk-adjusted mortality rates for all cardiac surgeons and hospitals in the state. While most patients who had undergone CABG surgery in one of the rated hospitals were unaware of or did not use the report cards, a 22 percent reduction in mortality rates since 1991 suggests that hospitals may be reacting to the information by making institutional improvements in quality (Schneider and Epstein 1998, Nash et al. 1998).

First steps in promoting informed choice in Medicare

Medicare policymakers must harbor reasonable expectations for both short- and long-term success of the informed choice initiative in Medicare. The initiative promises to improve beneficiaries' satisfaction with their care by increasing choice and fostering appropriate decisionmaking. However, the notion of informed consumer choice as an avenue for quality improvement in health care is largely untested, and the size and diversity of the beneficiary

3 HEDIS refers to the Health Plan Employer Data and Information Set, measures of health care quality and health plan performance developed by the NCQA.

population makes Medicare's efforts to empower consumers particularly challenging.

Empowering Medicare beneficiaries as value-based health care consumers must necessarily be a long-term goal. In the short term, limits in beneficiaries' knowledge of relevant health care concepts, a widespread unfamiliarity with alternatives in health care delivery, and considerable uncertainty about how to use comparative information in making enrollment decisions are significant obstacles. These problems should subside somewhat as more beneficiaries with experience making health care enrollment decisions and who have used different types of health care delivery arrangements age into the program. But addressing current limitations will require a sustained effort by the program and other stakeholders to increase understanding and beneficiaries' comfort with the informed choice process.

In the short term, Medicare needs to set goals for helping beneficiaries become informed health care consumers and to assess regularly its progress in meeting those goals. Medicare's education and information initiatives must consider the information Medicare beneficiaries need and the best ways of providing it. The program also must adapt its efforts to the information obtained through continued assessments of HCFA's efforts and research and demonstrations of health care decisionmaking.

Statutory measures to help beneficiaries make informed choices

In the BBA, the Congress attempted to expand enrollment options available to Medicare beneficiaries and to ensure that beneficiaries would understand those new options. The BBA also established new user fees levied on health plans participating in Medicare to

fund efforts to educate and inform beneficiaries.

Expanding choices

The Medicare+Choice program expanded the range of health plans eligible to participate in the program. Before enactment of the BBA, participation of private health plan was limited to health maintenance organizations (HMOs). Under Medicare+Choice, preferred provider organizations, provider-sponsored organizations, private fee-for-service plans, and medical savings accounts in conjunction with high-deductible plans may now contract with Medicare. These types of plans have been slow to join the program, however. In 1999, provider-sponsored organizations were the only new type of plan available in Medicare+Choice (MedPAC 1999).

Ensuring development and dissemination of information

The BBA also included numerous specific provisions designed to ensure that beneficiaries would have adequate information to make decisions in the new Medicare+Choice environment. The law required HCFA to implement initiatives to help beneficiaries understand the choices available to them and established new requirements for plans participating in the program to disclose information.

The BBA requires HCFA to distribute general information to all beneficiaries about benefits and cost-sharing under traditional Medicare, Medicare+Choice enrollment procedures, supplemental coverage through medigap policies, Medicare SELECT, and beneficiary grievance and appeals processes. HCFA must also provide beneficiaries with a list of the Medicare+Choice plans available in their area and local information to compare characteristics of each plan offered, including:

- type of plan (for example, health maintenance organization);

- benefits offered (basic and supplemental);
- geographic areas the plan serves;
- beneficiary cost-sharing, copayments, and limits on out-of-pocket expenses;
- provider and physician networks; and
- quality of care furnished.

The BBA specifies that HCFA must disseminate this information widely through the Internet, printed materials, and a toll-free hotline, and that the agency must conduct campaigns nationwide to educate beneficiaries. The agency must also send printed materials to current beneficiaries at least 15 days before the annual election period (every November, beginning this year) and to prospective beneficiaries at least 30 days before they become eligible for Medicare.

Medicare+Choice organizations must also meet new information requirements prescribed in the BBA.⁴ They must provide detailed information to HCFA about the plans they sponsor, including information describing the geographic areas, covered benefits, plan rules, grievances and appeals procedures, and quality assurance programs. The agency uses this information to prepare comparative materials for beneficiaries and to aid in administrative oversight. Upon request by beneficiaries, Medicare+Choice organizations must also disclose information about coverage, the number and type of enrollee complaints, limits on costs or use of services, and physician reimbursement procedures.

Financing beneficiary education and information

The BBA authorized HCFA to collect user fees from Medicare+Choice organizations as a funding mechanism to carry out the agency's beneficiary education mandate.

⁴ A Medicare+Choice organization is an entity that holds a contract with the Secretary of Health and Human Services and is responsible for meeting the terms and conditions of the Medicare+Choice program. A plan is set of benefits, cost-sharing, and premiums offered by a Medicare+Choice organization. A Medicare+Choice organization may offer more than one plan.

Although the law allowed the agency to collect up to \$200 million in user fees in fiscal year (FY) 1998 and \$150 million in FY 1999, the Congress authorized collection of only \$95 million in each year.

HCFA's efforts to implement BBA requirements

Although HCFA has yet to fully implement its initiatives for educating and informing beneficiaries, early feedback on the agency's initial efforts suggests that they should be modified. Information from HCFA's own evaluations and current research on consumers' decisions can help to redirect these efforts, although the BBA's prescriptiveness is likely to constrain the agency's ability to adapt them.

Experience of the first year

Since the BBA was enacted, HCFA and others have undertaken considerable work to understand beneficiaries' needs for information and to devise ways to meet those needs. With the Agency for Health Care Policy and Research (AHCPR) and the Office of Personnel Management, HCFA sponsored a conference on consumer information in December 1998 that brought together prominent researchers and those working to help consumers make decisions to discuss current issues (FACCT 1999). Research under way on consumer decisionmaking and development of information tools by HCFA, AHCPR, the Robert Wood Johnson Foundation, the Research Triangle Institute, and others will increase understanding of beneficiaries' needs for information and the best ways to address them.

The Institute of Medicine's (IOM) Committee on Choice and Managed Care convened a two-day workshop in March 1998 on developing an information infrastructure for Medicare beneficiaries. It resulted in several specific recommendations for work at the national, state, and local levels. The committee addressed short-term concerns

about the initial stages of HCFA's beneficiary education campaign, recommending that HCFA test market its mailing materials; enlist national, state, and local partners in the education initiative; and request more time from the Congress to develop an adequate information infrastructure at the beginning of the process (Jopeck and Lewin 1999). Because the committee was concerned that program changes might panic beneficiaries, it also recommended emphasizing in HCFA's initial beneficiary information materials that beneficiaries need not change their current health care arrangements if they were satisfied with them.

In response to these recommendations, its own research, and the research of other groups, HCFA decided to test its National Medical Education Program (NMEP) in five states, rather than launch a nationwide campaign in the fall of 1998. Beneficiaries in the pilot states received a copy of HCFA's 36-page *Medicare & You* handbook (which included comparative information on options), and they could call a toll-free consumer assistance hotline. Beneficiaries in other states received only a short informational bulletin. HCFA plans to use the findings from its evaluation of the pilot test to modify its consumer information initiative and will launch a nationwide information and education campaign in the fall of 1999.

HCFA's national Medicare education initiative

The goals of the National Medicare Education Program (NMEP) are to enable beneficiaries to access information when they want it; foster understanding of coverage options; and encourage the perception that NMEP, HCFA, the federal government, and its partners are credible sources of information (Jopeck and Lewin 1999). NMEP is a multifaceted plan that includes assessment components to provide for program accountability and to generate data for continuous quality improvements.

Beneficiary mailings: Due to time and fiscal constraints, HCFA scaled back the first mailing of the *Medicare & You* handbook from all Medicare beneficiaries to 5.5 million beneficiaries in five pilot states—Arizona, Florida, Ohio, Oregon, and Washington—in early November 1998. Residents of those states also may request the handbook in Spanish, audiocassette, or Braille. Simultaneously with the handbook mailing, HCFA sent out an abridged bulletin version to

beneficiaries in the remaining 45 states.

- Toll-free hotline: The availability of this hotline was phased in over one year. It first was accessible only in the five pilot states but now is available nationally. Customer service representatives staff the phone number during business hours on weekdays. At all other times, an automated system allows beneficiaries to obtain answers to most frequently asked questions, order Medicare publications, or order a disenrollment form in either English and Spanish.
- Internet resources: Early in 1998, HCFA launched its beneficiary-oriented Web site at www.Medicare.gov. This site contains the *Medicare & You* handbook and a list of resources for beneficiaries and those who assist them. Both general

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HCFA's national Medicare education initiative

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and comparative information are available online through the Medicare Compare database. This resource allows beneficiaries to learn about plans in their service area and the plans' benefits, costs, consumer satisfaction scores, and standardized indicators of performance. HCFA has partnered with public libraries nationally in an effort to help beneficiaries access relevant information on the Web.

- Local initiatives: These initiatives include a train-the-trainer program, which provides national, state, and local organizations with the necessary tools to train other local groups to educate beneficiaries. HCFA and its local offices have partnerships with a group of about 125 such organizations called the National Alliance Network. This local partnership is in addition to a longstanding relationship between HCFA and State Health Insurance Assistance Programs, state counseling programs supported, in part, by federal money.
- Assessment of the NMEP: HCFA is undertaking an assessment of NMEP to provide data for continual quality improvement in NMEP activities and for program accountability. HCFA is taking a two-prong approach in assessing the NMEP: channel-specific assessments and cross-cutting assessments. The channel-specific approach assesses the performance of the different media by which beneficiaries receive information. For example, analysis of the toll-free hotline includes collecting data from taped calls, conducting focus

groups with customer service representatives, and collecting data from a call-back survey. As part of assessing the effectiveness of the Internet activity, a bounce-back form surveys visitors as they are leaving the Medicare.gov Web site. Cross-cutting assessments will provide feedback on how various components of the NMEP work individually and together. In-depth analysis of six communities will help identify best practices--especially those related to providing accessible sources of information, understandable presentation of information, and model efforts of local coordination. An ongoing beneficiary survey of the Medicare population, the Medicare Current Beneficiary Survey, will include questions assessing beneficiary knowledge of Medicare in general and preferences among alternative sources of information. Cross-cutting assessments will also give attention to special subgroups, such as disabled beneficiaries, Spanish-speakers, and those who are newly enrolled in Medicare.

- The Consumer Advisory Panel on Medicare Education (CAP-ME): HCFA is assembling a 11-member panel to provide advice on effective education programs that help beneficiaries make informed decisions under Medicare+Choice. CAP-ME members will be appointed for one- to four-year terms and will include individuals representing such groups as disabled beneficiaries, consumers, women, and minorities. Individuals who represent plan and insurer perspectives, senior groups, employers, and providers are also candidates for membership. ■

The NMEP features a toll-free telephone hotline, an annual handbook mailed to every beneficiary household, a Web site featuring local comparative information on plans, and a community-based education and outreach campaign. To help meet the goals of the NMEP, HCFA has developed a network of more than 125 partner organizations, including public and private employers, educational institutions, consumer and advocacy organizations, and unions.

The Congress authorized HCFA to collect \$95 million, or approximately \$2.40 per beneficiary, in each of two years: FY 1998 and FY 1999. In FY 1998, HCFA used about half of the total NMEP budget to establish and support a fully operational toll-free hotline and about 20 percent to cover the cost of printing the *Medicare & You* handbook and the shorter bulletin. In FY 1999, HCFA faced higher costs associated with sending a handbook to every beneficiary household and implementing the toll-free hotline nationally. The remaining costs, including the Web site, community-based outreach, and program support activities (such as assessment, surveys, social marketing, and planning) are not likely to decrease in the next two years because the Web site is still in its initial market-testing phase. Furthermore, basic outreach is still needed to increase: the general awareness of beneficiaries, and program evaluation will continue to be necessary to glean lessons learned from the NMEP's initial years.

Preliminary evidence suggests problems with HCFA's efforts

Although it is too early to assess whether the NMEP will ultimately meet its goals, preliminary evidence from the pilot and reports from consumer advocates, practitioners, and others actively involved in educating beneficiaries suggests the first stages of HCFA's initiative achieved only limited success. Although some problems may relate to low interest and knowledge of enrollment options among beneficiaries, others relate to the specific information provided and how that information was conveyed.

RECOMMENDATION 4A

The Congress should allow HCFA more administrative flexibility in meeting its obligations to inform beneficiaries by relaxing legislative requirements pertaining to content of consumer information materials and means of dissemination.

MedPAC's preliminary assessment of the beneficiary education and information program suggests its limited initial success resulted from a general lack of interest among beneficiaries considering enrollment options, confusion about the significant changes in Medicare over the past year, and fundamental problems with the informational materials and their distribution. Continuing research and findings from HCFA's NMEP assessment should provide information to remedy the latter problems, but the detailed prescriptive requirements of the BBA limit the agency's ability to make substantive modifications and to focus resources where needed.

As information about the decisionmaking process of Medicare beneficiaries accumulates, the information and education infrastructure should evolve in response. By relaxing legislative requirements, the Congress would help HCFA improve its efforts to educate and inform beneficiaries. Such adjustments would provide the agency with the latitude to change the program in response to continuing research on consumer decisionmaking, feedback from consumer groups, and the agency's own assessment of the effectiveness of its efforts.

MedPAC anticipates HCFA would use the administrative flexibility granted by the Congress to focus its efforts to educate and inform beneficiaries more effectively and efficiently, rather than to increase the scope

Current evidence suggests that most beneficiaries do not use the informational materials HCFA mailed to them. For example, while every beneficiary household received either a bulletin or handbook from HCFA in 1998, a recent national telephone survey showed that less than half of seniors recall receiving these materials (Consumer Action 1999). Of those who remembered receiving the materials, 22 percent said they did not read them.

Use of HCFA's toll-free hotline was also less than expected. Private consumer assistance groups and other observers suggest the low volume of calls reflected a low use of the Medicare handbook rather than a lack of questions among those who did. The low volume of calls might also be explained by HCFA's decision not to advertise the hotline (in order to test its capacity) and a low awareness of the service among beneficiaries and counselors.

Limited use of the informational materials and consumer assistance services may partly reflect limited interest among beneficiaries in changing their enrollment. Some beneficiaries may have saved the unread information for future reference. Furthermore, limited beneficiary use might also be a predictable response to one message prominently displayed in the materials: "If you are happy with your current coverage, you do not have to change" (HCFA 1998).⁵

Consumer advocates and counselors closely involved in helping beneficiaries interpret and understand the new materials report concerns about the content of the information mailed and its presentation. Some noted they found HCFA's consumer information handbook very complex and confusing and said that it required them to spend inordinate time and resources clarifying messages (MedPAC Expert Panel February 19, 1999).

Employee benefit counselors who advise retirees about their employer-sponsored Medicare coverage have also expressed concerns about the information HCFA disseminated in November 1998. Some representatives of both employers and unions said the materials did not adequately address the information needs of beneficiaries who have employer-sponsored Medicare coverage (MedPAC Expert Panel February 19, 1999). For example, although the handbook states that beneficiaries who have insurance through a former employer should contact that employer or union before choosing a health plan, representatives noted that many beneficiaries missed the message because it lacked prominent placement. These representatives also said that some confusion might have been averted had HCFA worked with employers to coordinate education efforts.

Some methods the BBA prescribed to disseminate information may not be the most effective or efficient for reaching and increasing the awareness of beneficiaries. Printed materials, for example, are relatively costly to produce, cannot directly help those with low literacy, and are subject to accuracy problems because of deadlines for obtaining and publishing information.⁶

Immediate steps needed to support informed choice

MedPAC offers two recommendations to increase the potential success of HCFA's education initiatives and to address immediate concerns. First, the Congress should provide the Secretary with the administrative flexibility needed to improve the utility of the information initiatives based on ongoing research and assessment efforts. Second, the Congress should ensure that HCFA's efforts have an equitable and reliable source of adequate funding.

⁵ This message, although intended to minimize anxiety, could be a disservice to those beneficiaries who lack supplemental insurance and others who might benefit from enrolling in a Medicare+Choice plan.

⁶ Because of time constraints, comparative information may be outdated by the time of the open enrollment mailing. The information HCFA receives from plans to include in the comparative information reflects plans' benefit decisions as of July. By November, when beneficiaries receive the information, plans may have chosen to expand their benefit packages.

of those efforts. For example, the agency's self-assessment and evaluation efforts might suggest scaling back efforts to mail comprehensive comparative materials to each beneficiary annually. Instead, the agency might inform beneficiaries of the opportunity to change enrollment and provide them with a toll-free number to request written materials or obtain other assistance. Alternatively, HCFA might reallocate resources from printing costs of the handbook to other condensed materials or to more effective methods of dissemination, such as personal communication.⁷

RECOMMENDATION 4B

The Congress should fund HCFA's education initiatives adequately and directly through the appropriations process rather than through assessing user fees on Medicare+Choice organizations.

MedPAC recommends the Congress directly appropriate adequate funds for the NMEP to ensure reliable financing for HCFA's annual education program. Under the current funding scheme, health plans, whose enrollees represent about 15 percent of Medicare beneficiaries, are funding efforts to educate and inform all beneficiaries. Medicare+Choice organizations thus are paying to disseminate information on the availability of their services in addition to those of their competitors. Moreover, when Medicare+Choice plans drop out of the market, the user fee assessed on each remaining plan increases (MedPAC 1999). User fees are thus unreliable to support a continuing program, especially if increases in fees reduce plans' incentives to participate in Medicare+Choice.

Adequate funding would help ensure beneficiaries receive needed information on a timely basis. NMEP funding must

cover the costs of mailing information to each beneficiary household, maintaining the Internet site, undertaking community-based outreach, and assessing and evaluating the agency's activities. Although the Congress must provide HCFA the resources to fulfill its legislated responsibilities, the agency also should make the most of available funds while improving its effectiveness by collaborating with private groups that provide consumer assistance services and help beneficiaries obtain and process information.

Helping beneficiaries make informed choices over the long term

Although increased administrative flexibility and improved funding mechanisms would help HCFA improve its efforts to support informed decisionmaking by beneficiaries in the short term, additional steps are needed to foster appropriate choices and promote value-based competition over the longer term. If HCFA's efforts are ultimately to succeed, they must be founded on the best available evidence of consumers' needs for health care information and must consider specific characteristics of the beneficiary population that affect those needs and the best ways of meeting them.

Achieving the objectives of the informed choice initiative depends on three points. Beneficiaries must:

- have enrollment options available,
- obtain information to understand and to compare their options, and
- use and incorporate that information into their enrollment decisionmaking process.

Numerous challenges must be addressed in meeting these conditions.

Availability of enrollment options

Making informed choices requires having options from which to choose.⁸ To make enrollment decisions, beneficiaries must consider the types of coverage available to them, including Medicare+Choice options, supplemental insurance options (medigap policies), employer-sponsored plans, and Medicaid.

Most, but not all, beneficiaries live in areas served by Medicare-Choice organizations. Between June 1996 and March 1998, the share of beneficiaries with access to at least one risk plan rose from 65 percent to 72 percent (MedPAC 1998). While 7 percent of all risk enrollees were affected by nonrenewed contracts with the start of Medicare+Choice in January 1999, only about 1 percent of former risk enrollees were left with no managed care option (HCFA 1999). Beneficiaries who live in certain areas, particularly rural counties, still are limited to traditional fee-for-service Medicare because no private plans serve their areas, although most such beneficiaries have other types of supplemental coverage options to consider.

Some analysts believe that Americans are accustomed culturally to a market economy in which choices abound (Schaeffer and Volpe 1999). However, choices also can become overwhelming. According to the perspective of consumer advocates and beneficiary counselors, beneficiaries seem to prefer a small range of choices from which to select coverage (MedPAC Expert Panel February 19, 1999). This preference, however, may not reflect interest in having fewer choices but a desire for simpler decisionmaking.

⁷ While face-to-face communication is very labor and resource intensive, local organizations have effectively reached vulnerable beneficiaries in their communities and educated them about Medicare. If granted administrative flexibility, HCFA might consider reallocating resources of its consumer information program to bolster such community-based outreach.

⁸ Beneficiaries also face choices of primary care physicians, specialists, hospitals, and treatment alternatives. Chapter 2 discusses the need to develop provider-specific information on health care quality to aid in these decisions.

⁹ This interpretation conforms with research indicating a strong correlation between consumers' satisfaction with their health plan and the availability of choices among health plans (Davis et al. 1995). In other words, the availability of choices appears to improve the satisfaction of consumers who have options in health coverage.

Helping beneficiaries obtain relevant information

To be effective, Medicare's beneficiary education initiatives must account for wide diversity in beneficiaries' personal circumstances that affect both the information they need and how they receive it. Increasing beneficiaries' ability to be informed consumers must necessarily be a long-term goal. Many beneficiaries lack the basic knowledge of health systems they need to use comparative information on options, and most are unfamiliar with the measures of health care quality and health plan performance that can be used to differentiate options. Further study will be needed to determine the best ways to provide comparative information to beneficiaries and to answer their particular questions about health care coverage effectively and efficiently.

Information to support beneficiaries' enrollment decisions

Developing materials to help beneficiaries make enrollment decisions involves considering the information they need, the appropriate messages to stress, and the details to present.

Types of information needed

Medicare program decisions about what information to provide to beneficiaries should be based on what beneficiaries know and what experts believe they need to know to make informed enrollment decisions.

Because beneficiaries lack basic knowledge of Medicare and the health care delivery system, and because they are unfamiliar with health care decisionmaking pertaining to

Medicare+Choice, efforts to inform beneficiaries must educate them about the key components of health care delivery systems and the Medicare+Choice program (see box on this page). Many beneficiaries' understanding of health care concepts and terms is inadequate to enable them to use comparative information to assess their enrollment options. Further, many beneficiaries are unfamiliar with

managed care and other types of health care arrangements. Beneficiaries are also uncertain about which features of their enrollment options they should consider and compare, given their own circumstances and preferences.

General information on the health system and the Medicare program—such as benefits the program covers, the difference between traditional Medicare and Medicare+Choice, and the purpose of supplemental insurance coverage—would

Current beneficiary knowledge

Knowledge of the health care delivery context

Evidence indicates that many consumers do not understand the differences between traditional fee-for-service and managed care plans. Results from a national survey find that consumers failed to identify key terms and could not differentiate major characteristics of managed care or fee-for-service insurance. For example, only about 25 percent of respondents correctly identified the type of insurance that uses primary care physicians as "gatekeepers" (Isaacs 1996).^a

Lack of familiarity is even more pronounced among Medicare beneficiaries, 85 percent of whom still receive their coverage through the traditional fee-for-service program. A recent survey of Medicare beneficiaries found that 30 percent of respondents knew virtually nothing about health maintenance organizations (HMOs), even though half were enrolled in one at the time of the survey. Researchers also found that respondents who were HMO enrollees have poorer understanding of the differences between HMOs and fee-for-service than do fee-for-service enrollees (Hibbard and Jewett 1998).

Knowledge of Medicare

Knowledge of the traditional Medicare program appears to vary. About 40 percent to 50 percent of beneficiaries believe they know most or all of what

they need to know about Medicare in general—which services are covered, what beneficiaries must pay to cover those services, and supplemental insurance (Murray and Shatto 1999). But some specific aspects of the Medicare program are better understood than others. For example, a nationally representative survey conducted in 1998 found that 85 percent of those 65 years and older knew that Medicare pays for hospital bills and doctor bills. About 63 percent of the same group understood that Medicare does not pay for prescription drug coverage. However, only 44 percent said they know Medicare does not pay for long-term nursing home care (Kaiser Family Foundation and Harvard School of Public Health 1998).

One reason beneficiaries may be uninformed about HMOs and their health plan options but relatively informed about other aspects of the Medicare program is that most tend to seek specific information to address situations that arise. According to the 1997 Medicare Current Beneficiary Survey, 94 percent of beneficiaries said they "did not need to find information about the availability and benefits of HMOs" in the previous year, and 57 percent of beneficiaries said they knew little about HMOs (Reilly 1998). Moreover, few actually tried to learn about HMOs and their functions.

Continued on page 66

^a Certain managed care organizations do not require referrals from primary care physician to access specialists but most Medicare HMOs do.

Current beneficiary knowledge

Continued from page 65

Beneficiaries' plan-specific knowledge stems primarily from experience—their own and that of friends and family. Knowledge or use of information on plan quality, for example, is poor and this information is not deemed essential by consumers in choosing plans, even if it is readily available (Tumlinson et al. 1997). On the other hand, beneficiaries understand general Medicare-related information, such as the lack of prescription drug coverage, because most beneficiaries have likely encountered the need to obtain a prescription. By contrast, the general lack of understanding about long-term care coverage could result, in part, from most beneficiaries not seeking this information until they need nursing home care.

Knowledge of supplemental insurance

Medicare beneficiaries' understanding of their supplemental insurance options also varies. Understanding of private supplemental insurance options seems to have increased following enactment of legislation to standardize medigap benefit

packages. For example, the number of beneficiary complaints to state insurance departments has dropped significantly since the standardization measures took effect (McCormack et al. 1996a, Rice et al. 1997). But it is not clear that beneficiaries understand the difference between basic and supplemental coverage. Focus group research among state-based counselors indicates confusion among elderly and disabled beneficiaries about what to do to ensure adequate coverage (Frederick Schneiders Research 1998). Recent evidence shows that poor and low-income beneficiaries who qualify for state Qualified Medicare Beneficiary or Specified Low-Income Medicare Beneficiary programs do not take advantage of these options, in part, because they are not aware that they are eligible (Rosenbach and Lamphere 1999). Awareness of these programs and their eligibility criteria is further limited by cultural and language barriers, administrative and bureaucratic hassles, and a stigma attached to receiving a payment perceived as welfare (GAO 1999a). ■

Low-Income Medicare Beneficiary (SLMB) programs, whether they have Medicare+Choice plans available in their area, and whether they are eligible for health benefits through a current or former employer.

Beneficiaries also need specific information to compare coverage options. This information allows for comparison shopping by particular characteristics and promotes value-based decisions. Information of this nature should include:

- out-of-pocket costs (premiums and cost-sharing),
- benefits,
- service area,
- plan performance,
- access to primary care physicians and specialists,
- convenience (location of care, amount of paperwork and other administrative burdens), and
- rights as consumers and patients.

Beneficiaries also may benefit from information that provides guidance on which points to consider and compare in choosing among enrollment options. The Committee for Choice and Managed Care of the IOM identified several questions that Medicare's informational materials should provide to help beneficiaries assess enrollment options, including:

- Will I be able to continue to see my current physician or a specialist if the need arises?
- Will the plan save me money and, if so, how?
- How will my prescription drug costs be covered?
- Can I leave the plan if I'm dissatisfied?
- How can I resolve a complaint I may have?

Emphasis on key messages
Emphasizing key messages in materials designed to educate and inform beneficiaries can help them decide whether and how to use them. For instance, the IOM recommended HCFA's first-year mailing materials state prominently that beneficiaries were not in danger of losing traditional Medicare coverage and that they could delay making any choice indefinitely while still covered by traditional Medicare (Jopeck and Lewin 1999). This message may have prevented

provide a context for beneficiaries to assess their specific circumstances and choices (Hibbard et al. 1998, Jopeck and Lewin 1999, FACCT 1999).

Beneficiaries also need information related to their personal circumstances that influence the availability and appropriateness of their choices. Information beneficiaries should consider in making an informed enrollment decision include whether they are eligible for Medicaid coverage or for coverage under the Qualified Medicare Beneficiary (QMB) or Supplemental

panic among beneficiaries, as it was intended to do, but it also may have reduced their interest in changing enrollment status.

Emphasizing certain messages is also likely to make those messages more salient and to encourage consumers to seek any additional information they need to make an informed decision. For example, health care consumers may not understand that quality varies among plans. If they understand the “quality varies” message, consumers may be inclined to consider information on quality during the decisionmaking process (FACCT 1999). Repetition of certain information is an important educational strategy that both emphasizes key messages and guides consumers to incorporate these messages into the decisionmaking process. To effectively draw consumers’ attention to specific important messages, each component of the education campaign—including printed materials, information fairs, and the Internet—must incorporate and repeat key messages.

Level of detail Although researchers believe health care consumers need a certain amount of information to make fully informed enrollment decisions, it is not clear that consumers value detailed information on coverage. Consumers primarily factor costs, access to their doctors, and benefits into their decisionmaking (Lubalin and Harris-Kojetin 1999, Edgman-Levitan and Cleary 1996, Isaacs 1996, Tumlinson et al. 1997). Evidence suggests that less may be more—that is simple, accurate, and credible information is most effective—in increasing awareness and helping beneficiaries decide whether to consider different coverage options initially. Experience from nutrition labeling demonstrates the value of providing fewer information pieces to help consumers obtain the basic information they want.¹⁰ Medicare’s information initiative might give a core set of key information to all beneficiaries, while making more detailed information easily accessible to those who want it.

Effective methods of disseminating information

Dissemination methods affect whether relevant information is accessible to beneficiaries. Methods used by Medicare should reflect understanding of when beneficiaries seek information, their sources of information, and the modes of dissemination effective in reaching them.

Timing of dissemination Beneficiaries’ needs for information to compare enrollment options arise at different times. One critical time when such information is likely to be useful is when they first become eligible for Medicare. Some beneficiaries also may desire this information to prepare for scheduled open enrollment periods; however, beneficiaries will be more likely to consider changing enrollment during those periods if their personal circumstances have changed, such as when

- the health plan in which they are enrolled leaves their service area;
- the price of their supplemental insurance policy changes substantially,
- their employer no longer offers retiree health benefits,
- their health changes, or
- their income changes.

Dissemination of comparative information should be timed to address information needs of prospective Medicare beneficiaries and of beneficiaries affected by plan withdrawals and service-area changes. Reaching beneficiaries whose personal circumstances have changed is more difficult but could be addressed by highlighting situations in which beneficiaries should pay special attention to materials. One model of such an effort is the informational material designed to assist in preparing income tax returns.

Common core information applies to all taxpayers and includes statements designed to draw attention to those whose particular circumstances warrant special steps.

Sources of information HCFA is only one of many important sources of information for beneficiaries. In fact, beneficiaries and those who act on their behalf are more likely to seek information from friends, family, and physicians than from the government. Consumer advocates, counselors, hospital social workers, community groups, Medicare+Choice plans, and health care providers also play key roles as information sources.

For sources of information to disseminate information effectively, beneficiaries must perceive them to be credible and reliable. According to focus group research, consumers are wary of information about plan performance and quality—especially information that comes from the plans themselves. Health care consumers seek information from their friends, family, and physicians—sources they perceive to be reliable. They are also likely to respond more favorably to data collected and reported by an independent, knowledgeable third party (Edgman-Levitan and Cleary 1996).

Consumers also want information from sources that understand their particular circumstances or those of “people like them.” They are interested in the experiences individuals with similar characteristics have had in accessing appropriate care. This is why beneficiaries tend to rely on friends and family more than experts for their information (Edgman-Levitan and Cleary 1996).

Because a significant portion of the Medicare beneficiary population relies on adult children, spouses, or others to act as decisionmakers on their behalf, these agents must be considered when designing Medicare education campaigns and information services. Some

¹⁰ For analysis of the NLEA measures to standardize food labels, see Appendix A.

beneficiaries rely on agents because of physical or cognitive limitations. Others may have become accustomed to relying on agents, such as employers. When they no longer have this type of help, they may feel poorly equipped to make enrollment decisions for themselves (Gibbs et al. 1996).

Adult children, spouses, other family members, and friends who serve as caregivers to Medicare beneficiaries also seek information about health insurance. Preliminary assessment of HCFA's toll-free hotline has shown that about 40 percent of callers are caregivers seeking to answer questions about a beneficiary's claims processing or coverage. This group may need specific information that differs from the general information needs of beneficiaries. HCFA has made strides in bringing together umbrella organizations of caregiver groups, as well as consumer advocates on the national, state, and local levels specifically to address the needs of this population through collaboration. These organizations-including the American Association of Retired Persons, the International Longevity Center, and the Older Women's League-have devoted resources and energy to develop materials and methods to serve beneficiaries and their families.

Beneficiaries tend to trust and seek the advice of their physicians, whom they believe are well-positioned to gauge the health care needs of their patients and make recommendations accordingly (Jopeck and Lewin 1999). In the current health care environment, physicians are expected to be knowledgeable about everything from health policy to health insurance options and the quality of health plans. Physicians must know about coverage options characteristics to give their patients reliable information. To meet patients' expectations, physicians must be able to answer their patients' questions directly or know where to refer the patient for answers. However, physicians and

others have raised concerns about possible conflict of interest in providing information to patients about plans. Partly to address these concerns, the American Medical Association (AMA) has begun to educate its members about Medicare+Choice changes and how to address patients' questions while conforming to ethical guidelines.

Modes of dissemination Research continues to assess the relative value of various modes of disseminating information to Medicare beneficiaries, including print, television, radio, the Internet, and personal communication.

In general, face-to-face counseling appears to be the most effective way to assess and meet beneficiaries' informational needs. Local organizations, State Health Insurance Assistance Programs (SHIPs), and Area Agencies on Aging play a role in counseling beneficiaries about general Medicare issues. SHIPs have been particularly effective in outreach and education efforts (McCormack et al. 1996b). Familiarity with local or resident populations and enrollment options gives local organizations, counselors, and volunteers an advantage in addressing beneficiaries' needs and in reaching vulnerable beneficiaries.

HCFA's toll-free hotline could serve as a valuable source of personal communication, particularly for homebound beneficiaries and their caregivers. In using this service, however, beneficiaries dislike automated menus and often demand responses from a live person. Because HCFA staffs its hotline during business hours, this service could meet beneficiaries' needs, depending on the volume of calls and the waiting time.

The Internet is a potentially attractive dissemination medium because it incurs relatively low costs and facilitates interactive use of information. But it is not yet a leading source of information for Medicare beneficiaries; only 7

percent of beneficiaries now have direct access to the Internet (Reilly 1998). The Internet is likely to play a greater role in providing enrollment information in the future as more of those aging into Medicare have experience and familiarity with its use. In the short term, adult children, caregivers, physicians, and employers' health benefit representatives are among several potential users who are also decisionmaking agents or provide credible information to beneficiaries."

The appropriate medium for reaching beneficiaries may vary among segments of the population. For example, according to consumer advocates for Latinos, Spanish-speaking beneficiaries heavily rely on Spanish-speaking television stations for information.

Helping beneficiaries use information in the enrollment decisionmaking process

Obtaining relevant information is necessary, but not sufficient, to ensure value-based choices. Beneficiaries also must be able to use this information in their decisionmaking processes. Information on coverage options is difficult for the average health care consumer to use and process and is even more complicated for certain segments of the Medicare population. Information processing is influenced by characteristics of both the information provided and the intended user of that information.

Information-related factors that influence appropriate use of information

The design of materials intended to help Medicare beneficiaries understand, use, and process information about their enrollment choices can either aid or hamper individuals' ability to use and process relevant messages appropriately. The formats used to provide information, the language used to describe options,

11 Most users of HCFA's Website (Medicare.gov) describe themselves as researchers, consumer advocates, or representatives of employee or union groups, according to preliminary analysis of responses to the bounce-back questionnaire users encounter when exiting the site.

and the comparability of those options also affect how well consumers can use materials and judge among their choices.

Making sense of multifaceted information Most people have difficulty processing multifaceted information, which may hamper their ability to make value-based decisions. According to decisionmaking theory, the average person has difficulty processing more than live to seven bits of information at a time (Sofaer 1994). Too much information may result in **overload**—shutting down consumers' will to use any of it.

Each category of information relating to health care enrollment options can include many different units of measurement and levels of detail. For example, health plan performance data might include information on NCQA accreditation status, several HEDIS measures, or member satisfaction rates. Similarly, assessing costs may require beneficiaries to judge different items across plans, such as copayments for different services and caps on **out-of-pocket** spending.

One approach to help beneficiaries use multifaceted information is to develop indices or summary scores that capture multiple aspects of a specific category of information in one information bit. For example, HEDIS scores, NCQA accreditation status, and other quality information might be combined to develop an overall quality rating for beneficiaries use. However, because developing such summaries requires determining appropriate weights and other potentially controversial decisions that could tend to favor one plan or plan type over another, consumer assistance groups might have greater latitude to develop these items than HCFA.

Comprehending complex and unfamiliar information If consumers do not understand certain characteristics of a plan they may decide those characteristics are unimportant or not

salient to making enrollment decisions. Quality-related information, such as indicators used in report cards of managed care plans, can be complex and difficult to understand, and those consumers who have access to this information often do not consider it (Hibbard and Jewett 1997). Consumers have difficulty interpreting quality measures, in part because they often lack a clear benchmark or standard for comparison. These findings emphasize the need for simple, clearly presented information accessible to consumers, and the need for education designed to demonstrate the value and use of certain types of information.

Formats used to present information The format is critical to determine how consumers frame a decision, analyze the alternatives, and rank their options. Presenting the same information in different formats, with varying emphasis on different options, can lead to different decisions because consumers construct preferences while processing information (Slovic 1998).

Standardization to increase comparability To compare health care options, beneficiaries must assess products that can vary in subtle, yet important ways. Standardization of options has been shown to increase comparability and to help consumers make better, more value-based choices. However, too much standardization can stifle the ability of the market to respond to evolving preferences.

The experience with food labeling provides an example of how standard information formats and terms can foster informed decisions. The NLEA of 1990 standardized and prioritized nutrition and health claims messages on all packaged foods in an effort to inform consumers' decisions in selecting healthful foods. The Food and Drug Administration required the food industry to follow a specific layout that positioned serving size and caloric information first, nutrition content information next, and

the list of ingredients below that. Regulations also defined specific terms (such as "low fat" and "high fiber") to facilitate comparisons of food products. Research suggests these efforts helped consumers to compare products and to choose more nutritious foods (Levy and Fein 1998).

The medigap insurance example illustrates potential problems with standardizing benefits, however. In OBRA 90, the Congress limited the variation in medigap policies that could be offered to 10 standard packages to increase comparison shopping among Medicare supplemental options, to decrease misinformation and fraudulent practices among medigap policy carriers, and to encourage **competition**.¹² Before medigap packages were standardized, beneficiaries were confused about the availability, cost, and coverage of Medicare supplements. Confusion among beneficiaries apparently decreased after benefits were standardized, but the legislation has hampered the ability of the insurance market to evolve in response to the rapid changes in the health care delivery system.

Standard benefits under Medicare+Choice similarly could lead to lower consumer satisfaction with available benefits. For example, the ~~snowbird/sunbird~~ population-beneficiaries who change their residence seasonally-is a unique group that innovative plans now can cover through various reimbursement mechanisms. In fact, certain plans offering reciprocity and similar arrangements that provide out-of-area coverage might not be able to do so if benefit offerings were limited to standard packages. An equally importantly consideration is that standardization could lock in current plan design, limiting plans' ability to adapt to changes in demand.

12 For analysis of the OBRA measures to standardize the Medicare supplemental benefits, see Appendix A.

Beneficiary characteristics that influence use of information

The diversity of beneficiaries makes efforts to educate and inform them particularly challenging. Certain segments of this population—particularly those with low education and income levels—have difficulty using relevant information (because of low general literacy or low health literacy). Beneficiaries with cognitive impairments also require special attention in designing education and information efforts.

Functional literacy and health literacy

Limitations in the ability of many beneficiaries to read and understand information about enrollment options present a barrier to the use of written materials. Functional literacy, a measure of an individual's ability to function in society based on reading ability, is low among the elderly. Findings from the National Adult Literacy Study show that 44 percent of those 65 years and older read at the lowest reading level—in other words, they do not read well enough to function fully in society (Kirsch et al. 1993). Health literacy, a measure of an individual's ability to read and comprehend health-related materials, is also low in the beneficiary population. For example, interviews with new enrollees in four Prudential SeniorCare plans indicate that 34 percent of English-speaking and 54 percent of Spanish-speaking respondents had marginal or inadequate functional health literacy, as measured by the *Short Test of Functional Health Literacy in Adults*.¹³

Beneficiaries who cannot competently read and comprehend relatively simple health-related materials will not be able to use multifaceted comparative information without outside help (Baker 1998, Gazmararian et al. 1999). Medicare could target this population and develop education strategies that increase awareness of basic terms and coverage

options. For example, television or radio advertisements could reach this population more effectively, increase basic Medicare awareness, and provide information about sources of insurance assistance counseling.

Low education and income levels

Efforts to educate and inform Medicare beneficiaries might appropriately target segments of the beneficiary population with low income and education levels because these characteristics are strongly associated with lower levels of knowledge about the health care delivery system. Beneficiaries in these categories are not likely to have access to or use available information. In a survey of Medicare beneficiaries in high HMO penetration areas, researchers found those with lower incomes and lower education levels knew less about the differences between HMOs and fee-for-service—even if they were enrolled in an HMO (Hibbard and Jewett 1998).

Cognitive impairments People with cognitive impairments make up a significant portion of the beneficiary population and are particularly unlikely to be able to access or process adequately the information needed to make appropriate health care decisions on their own. Approximately 10 percent of Medicare beneficiaries have some form of cognitive disorder, such as Alzheimer's disease. Caregivers, such as adult children and other family members, must be targeted by education and information efforts to help them make appropriate enrollment decisions for this group.

Additional steps needed to build the informed choice infrastructure over the long term

To build a sustainable informational and educational infrastructure that promotes value-based choices, Medicare must assist beneficiaries in becoming active

participants in the informed choice process. Medicare's information strategies can facilitate beneficiaries' receipt, use, and processing of consumer information. Information strategies also must address the concerns of a diverse Medicare population with varied needs and provide consumer protections.

Investing in decisionmaking tools

One important way to help beneficiaries process information is through decisionmaking tools designed to help them frame their enrollment decisions, consider relevant issues, and make trade-offs. These tools would lead the user through a series of steps to a range of manageable, understandable choices. For example, such tools first might narrow the list of coverage options to the least expensive ones based on co-payments, deductibles, or other out-of-pocket spending, then further narrow coverage options based on desired benefits and measures of health care quality or health plan performance. Finally, a decisionmaking tool could rank options according to beneficiaries' priorities. By making small decisions sequentially, beneficiaries would face choices that are easier to process.¹⁴

RECOMMENDATION 4C

The **Secretary** should develop and evaluate interactive tools that give beneficiaries a framework for understanding their choices and that help them to process information.

HCFA is in partnership with AHCPR and the Research Triangle Institute to customize a decisionmaking aid known as the "Quality Navigation Tool" for the Medicare population. This document is designed to guide health care consumers through different kinds of decisionmaking, including the choice of health plans, doctors, nursing homes, and treatments. An interactive computer guide

13 Those who had inadequate health literacy often misread materials written at about a fourth-grade reading level, including prescription bottles and appointment slips. Those who had marginal health literacy had difficulty comprehending passages from the Medicaid rights and responsibility statement, written at about a 10th grade reading level.

14 The use of decisionmaking tools presents potential conflicts of interest between the consumer and the designer or sponsor of the tool, however, particularly if the tool steers a user toward a particular option.

would be the next step to enhance usability and assist beneficiaries in processing choice information. While most beneficiaries do not currently have access to the Internet, such products might be made more widely available through local seniors' centers or other venues.

The Medicare Compare database, although not designed as a decisionmaking tool, could potentially be a **useful** comparative resource. The interactive database now allows beneficiaries to key in their ZIP code and view the various plans available in their area. However, comparisons among more than two plans by cost, coverage, and quality require several steps and multipage printouts (Francis 1999). Furthermore, the database does not allow users to use hyperlinks to move to the Web sites of Medicare+Choice organizations, a potential source of more detailed information, although HCFA is issuing guidelines that explain how plans may request a link from Medicare Compare.

Examples of useful consumer guides and decisionmaking tools are found in the private sector, especially among large employers. For example, Ford Motor Company prepares and distributes information on health plan performance to its current and retired employees—more than half a million individuals. These documents explain the important characteristics consumers should consider when choosing a health plan, including quality measures. Sponsored plans then are scored in a simple, user-friendly format. Benefits counselors are available to help workers and retirees use and interpret these materials.

In April 1999, the GAO recommended that HCFA develop materials that would allow beneficiaries to compare the characteristics of several plans simultaneously, taking the information materials of the Federal Employee Health Benefits Program (FEHBP) as an example.¹⁵ The FEHBP distributes a booklet with costs, benefits, and quality

measures of participating plans in a chart that facilitates comparisons among several plans at once. The Office of Personnel Management also has a Web site from which users may download comparative information in different formats. The Web site also facilitates access to more detailed information by providing hyperlinks to the Web sites of organizations that sponsor health plans available to federal employees.

Developing standard terms

An important first step in making education or information materials relevant and useful for beneficiaries is to standardize terms. Materials that HCFA, Medicare+Choice organizations, and medigap policy carriers disseminate should present the most important factors in standard terms so the materials will reduce confusion, reinforce key messages, and be useful resources in decisionmaking. For example, a standard description with key messages and key components of a specific coverage option could allow beneficiaries to compare the basic characteristics of different options and narrow their choices,

RECOMMENDATION 4D

The Secretary should **define** and regularly update appropriate standard terms for describing Medicare coverage options. HCFA should use these terms in its informational materials, require their use by **Medicare+Choice** organizations, and encourage their use by medigap policy carriers and others who provide beneficiary information.

HCFA has a Workgroup charged with developing standard language for describing benefits to enhance beneficiaries' use of materials. The agency plans to include some components of the standard summary of benefits in materials mailed for the enrollment open season in the fall of 1999.

MedPAC urges the Secretary to assess periodically whether the standard terminology HCFA develops is understandable and easy to follow and whether it provides effective definitions. The agency should update terms according to the findings from this periodic assessment and as warranted by changes in the health services market.

Ensuring consumer protection

Even if efforts to promote informed choice meet the needs of many beneficiaries, specific segments of the population still may be vulnerable to inadequate coverage, poor quality care, or financial barriers to care. Because the preferences and needs of the average beneficiary may not be the same as the preferences and needs of the most vulnerable segments of the population, an information and education infrastructure must ensure adequate protections for them by assisting them or their caregivers to make appropriate decisions.

RECOMMENDATION 4E

The Secretary should study the enrollment patterns of beneficiaries, giving particular attention to vulnerable groups, to assess whether their informational needs are adequately met.

Analysis of Medicare beneficiaries' enrollment patterns could yield information on plan performance and on beneficiaries' satisfaction with their decisions and with the information and services they receive. HCFA is administering a disenrollment survey under the Consumer Assessment of Health Plans initiative to learn why beneficiaries disenroll from plans. Using this information, HCFA should study the enrollment patterns of the Medicare population as a whole and groups of beneficiaries who might be particularly vulnerable to problems. Research on enrollment patterns and evaluation of the NMEP, specifically cross-cutting assessments that focus on various segments of the population, should shed

15 FEHBP is a program administered by the Office of Personnel Management and is the health insurance benefit package for federal employees nationwide.

additional light on beneficiaries' informational needs, satisfaction with their coverage, and ability to navigate the Medicare environment.

MedPAC believes that it is important to study the enrollment patterns of all beneficiaries, but that beneficiaries who do not speak English and cognitively impaired beneficiaries may be particularly vulnerable to making inappropriate enrollment decisions. Moreover, the enrollment patterns of low-income beneficiaries should be studied to identify areas in which Medicare and state governments can coordinate education and outreach efforts to enroll qualifying beneficiaries into the QMB and SLMB programs.

One approach HCFA could take in studying the different segments of the beneficiary population would be to draw upon findings from professional market analyses. These analyses have shown that segments of the Medicare population differ in their needs for health care information (Etheredge 1999). Targeted educational efforts could learn from this body of knowledge and additional research of this type.

RECOMMENDATION 4F

The Secretary should monitor the prevalence of aggressive marketing techniques or abuses, especially toward vulnerable populations, such as frail beneficiaries and those without functional literacy.

Because beneficiaries frequently use health plans' marketing materials as a source of information, ensuring the accuracy of these materials must be an important part of any effort to promote appropriate enrollment decisionmaking. Unlike the under-65 population, most Medicare beneficiaries-about 67 percent-do not obtain any health benefits through an employer. They are therefore more likely to obtain information about coverage options directly from the sponsoring organizations that sell individual policies.

Researchers and consumer assistance groups have raised concerns that health plans are not providing beneficiaries with accurate and reliable information about their Medicare options. A recent study of HMO marketing techniques and materials in four cities found key information gaps regarding eligibility requirements, medigap insurance coverage, potential changes in premiums and benefits, and appeal rights and protections. Plans in specific markets were found to engage in inappropriate-and in some cases, illegal-marketing activity, such as telling potential enrollees that an agent had to visit their home before they could join the plan (Gerontology Institute 1999). Similarly, in two recent reports, GAO found that health plans have failed to provide accurate and useful information to Medicare beneficiaries (GAO 1999b, 1999c). Findings from a study of 16 HMOs showed that all of the surveyed plans had provided some inaccurate,

incomplete, or misleading information. For example, some erroneously informed beneficiaries that they needed a referral for a mammogram. Others told beneficiaries that they provided less comprehensive prescription drug coverage than originally promised in their contracts with HCFA.

GAO reports also criticized HCFA's oversight of Medicare-Choice organizations and identified several weaknesses in the agency's monitoring protocols, such as a failure to enforce existing regulations related to the beneficiary appeals process. GAO recommended that HCFA develop more comprehensive marketing standards and guidelines for Medicare+Choice organizations and that the agency monitor marketing materials more thoroughly (GAO 1999b). HCFA plans to implement a pilot test to determine whether centralized review of marketing materials by an independent contractor will improve and standardize the process (Cronin 1999). ■

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C H A P T E R

5

**Managed care for frail Medicare
beneficiaries: payment methods
and program standards**

R E C O M M E N D A T I O N S

- 5A** The Secretary should study factors affecting the costs of care of frail beneficiaries and all other Medicare beneficiaries to determine if changes are needed to improve Medicare+Choice claims-based risk adjustment for frail beneficiaries. This study should identify data needed to support improvements in the Medicare+Choice risk adjustment system.
-
- 5B** The Secretary should evaluate the use of partial capitation payment approaches for frail Medicare beneficiaries in specialized and Medicare+Choice plans.
-
- 5C** The Secretary should postpone by at least one year the application of the interim Medicare+Choice risk adjustment system to specialized plans. Plans should be paid using existing payment methods until a risk adjustment or other payment system is developed that adequately pays for care for frail Medicare beneficiaries.
-
- 5D** In the long term, the Secretary should set capitation payments for frail beneficiaries based on their characteristics, not of the type of plan to which they belong.
-
- 5E** Performance measures for programs for frail Medicare beneficiaries should reflect the beneficiaries' health care needs and special practices for their care.
-
- 5F** The Secretary should include special measures for evaluating and monitoring care for frail Medicare beneficiaries in the Medicare+Choice plan quality measurement and reporting requirements.
-
- 5G** The Secretary should not now limit enrollment into the Program of All-Inclusive Care for the Elderly to a particular time of the year.
-
- 5H** The Commission will await results from the Secretary's demonstration of for-profit entities in the Program of All-Inclusive Care for the Elderly before making a recommendation on allowing them to participate.

Managed care for frail Medicare beneficiaries: payment methods and program standards

The Medicare Payment Advisory Commission believes that payments and program standards should promote appropriate care of frail Medicare beneficiaries in all managed care programs. The risk-adjustment method HCFA will implement for Medicare+Choice does not appear to predict costs of frail beneficiaries' health care adequately, so it makes sense to delay its application to programs that specialize in caring for such people and to develop alternatives instead. HCFA should apply program standards developed for the Medicare+Choice program carefully to managed care programs for frail beneficiaries, considering the relevance of each standard to the beneficiaries the program serves.

In this chapter

- Comparing programs for frail Medicare beneficiaries
- Medicare risk adjustment and specialized plans
- Program standards

Under the Program of All-Inclusive Care for the Elderly (PACE), Social Health Maintenance Organization (S/HMO), and EverCare demonstrations, the Health Care Financing Administration (HCFA) has explored innovations in the delivery of health care services for frail Medicare beneficiaries who need long-term, chronic, and acute care. All of these programs receive per-person monthly payment amounts from Medicare. HCFA is considering how to determine the monthly amount for the plans that participate in these programs. For 2000, it has decided to pay them under existing methods and not move them to the same system used under Medicare+Choice. The Secretary also is making important decisions about the future of these programs in 1999 and 2000. She will write regulations for the permanent PACE program, determine how to make the S/HMO demonstration a permanent option under Medicare+Choice, and decide whether to extend the EverCare demonstration. A critical question facing the Secretary is how to preserve valuable features of the specialized programs and, at the same time, establish program rules that do not favor one delivery system over another and that protect beneficiaries equally.

The Balanced Budget Act (BBA) of 1997 requires the Medicare Payment Advisory Commission (MedPAC) to make annual recommendations on both Medicare and Medicaid payment methods and amounts for PACE. The Commission also must comment on the appropriateness of allowing private for-profit entities to participate in PACE. MedPAC does not have any mandated responsibilities on the S/HMO or EverCare programs but may respond to the Secretary's report to the Congress on the future of the S/HMO demonstrations, scheduled to be completed in 1999.

This chapter has three main sections.

- The first section compares PACE, S/HMO, and EverCare with one another and with Medicare+Choice. The analysis finds that these programs share some characteristics

but have different features. It also finds that frail Medicare beneficiaries may be enrolled in these programs or in Medicare+Choice plans. Further, plans participating in these programs sometimes are sponsored by organizations participating in Medicare+Choice. These overlaps in enrollees and participating organizations make a case for careful consideration of when payment methods and program standards should differ.

- The second section considers establishing Medicare payment rates for PACE, S/HMO, and EverCare and provides MedPAC's recommendations on the extent to which they should be calculated in the same way as payment rates under Medicare+Choice.

- The third section addresses which Medicare program standards for PACE, S/HMO, and EverCare should differ from those for Medicare+Choice. An analysis in this section finds some differences between the health care problems of beneficiaries targeted by specialized programs and those in the general Medicare population.

A discussion of setting payment rates from Medicaid for PACE participants is in Appendix B.

Comparing programs for frail Medicare beneficiaries

Although PACE, S/HMO, and EverCare all use managed care financing and case management tools to care for frail Medicare beneficiaries, the programs differ in several respects (see Table 5-1). This section compares PACE, S/HMO, and EverCare program objectives and evaluation findings. It concludes with a discussion of the overlap between programs for frail Medicare beneficiaries and Medicare+Choice, featuring a

description of the differences and similarities among PACE, S/HMO, EverCare, and Medicare+Choice enrollees and the sponsors of plans that participate in these programs.

Overview of Programs

Before deciding whether the programs need to be treated differently from each other or from Medicare+Choice, one should consider what features of the programs are unique and whether the unique features are valuable. Only then can policymakers decide whether applying Medicare+Choice payment methods and performance standards across programs has the potential to undermine or enhance unique features of the programs. This section provides an overview of each program, including operational characteristics and, when available, evaluation findings. Neither the S/HMO II nor the EverCare demonstration has been evaluated yet.

Program of All-Inclusive Care for the Elderly: Using adult day health centers as a focal point in delivery of care

A primary objective of PACE is to delay or prevent use of hospital and nursing home care. The program provides a comprehensive range of preventive, primary, acute, and long-term care. PACE plans differ from most managed care plans in that all enrollees are frail and service delivery and coordination are centered on adult day health centers. Enrollees must be eligible for nursing home placement, based on state Medicaid criteria. The program usually requires enrollees to visit the centers often so that team members can assess their health and provide services as needed and families can have a break from care. Under the BBA, the Congress changed PACE from a demonstration to a permanent program under Medicare, and it granted states the option to offer PACE to their Medicaid enrollees.

**TABLE
5-1**

Selected features of PACE, S/HMO, and EverCare programs

Feature	PACE	S/HMO	EverCare
Program objectives	Integrate delivery and financing of primary, acute, and long-term care services for a frail elderly population.	Include community based long-term care in an expanded managed care benefit package.	Provide better primary care to nursing home residents.
HCFA independent evaluation findings	Cost savings to Medicare, reduced use of institutional care.	Integration with primary care not successful; recommended changes led to S/HMO II.	None
Payment methods	Base rate is Medicare+Choice rate. PACE gets base rate times 2.39 frailty adjuster for each enrollee.	Base rate is 100/95 x Medicare+Choice rate. S/HMO I gets adjuster for NHC enrollees and reduced adjusters for others. S/HMO II uses a multivariate formula.	Base rate is 93/95 x Medicare+Choice rate. EverCare gets institutionalized adjusters for each enrollee.
Benefits	All medical and long-term care benefits covered through pooled Medicare, Medicaid, and private capitation payments. Outpatient drugs are covered.	All Medicare benefits, expanded benefits, and long-term care benefits. Outpatient drugs are covered.	Similar packages to Medicare+Choice plans, but no outpatient drug coverage.
Eligibility requirements	Enrollees must meet state nursing home certifiability criteria and be age 55 or older.	Same requirements as Medicare+Choice, but beneficiaries under age 65 excluded from S/HMO I. S/HMOs initially limited participation of frail beneficiaries.	Nursing home residency.
Number of sites	2.5	3 S/HMO I, 1 S/HMO II	6 under demonstration, 3 Medicare+Choice subcontractors
Characteristics of sponsors	Most are freestanding, community-based provider entities; several sponsored by providers that own HMOs.	HMOs and long-term care providers	National HMO corporation-United HealthCare.
First year of operation	1971 (On lok) 1990 (PACE)	1985 [S/HMO I] 1997 (S/HMO II)	1994

Note. PACE [Program of All-Inclusive Care for the Elderly], S/HMO [Social Health Maintenance Organization], BBA [Balanced Budget Act of 1997], NHC [nursing home-certifiable].

Source: MedPAC literature review.

Operational characteristics A multidisciplinary team of physicians, nurses, social workers, physical and occupational therapists, and others assesses enrollees' needs and develops treatment plans with patients and their families and provides much of enrollees' care. PACE plans cover a wide array of services, both medical and social, across care settings. Plans typically provide transportation, respite care, and meals in the adult day health centers and at home. Some sites also provide housing, although housing is financed separately from Medicare and Medicaid capitation. Though a PACE objective is to keep enrollees in the community, the program continues to pay for all services when participants must move into nursing homes. (In 1996, 6 percent of PACE enrollment days were spent in nursing homes.)

In addition to meeting state nursing home eligibility criteria, PACE participants must be at least 55 years old. Under the BBA, states re-evaluate annually whether PACE enrollees continue to meet state eligibility criteria, unless there is no reasonable expectation for improvement or significant change. Individuals who no longer meet the eligibility criteria must leave the program unless the evaluation finds that they are likely to meet the criteria again within six months. Although eligibility for Medicare and Medicaid is not required to join a PACE plan, most participants are covered by both programs. For these dual-eligible PACE enrollees, both Medicare and Medicaid make capitation payments that the plans pool to provide services.

PACE plans currently operate in 25 sites, with additional sites--known as "pre-PACE"-participating under Medicaid capitation only. The plans typically are small, with the largest site enrolling fewer than 1,000 participants. Several factors have kept the program relatively small:

- The program is available only to a subset of the Medicare population.
- PACE sites have high fixed costs. Sites are organized around one or

more buildings-adult day health centers-and salaried staff provide most services. Both of these features have made it harder for PACE plans to expand their capacity than if contracted providers had furnished most services in their own offices.

- Plans have limited budgets for generating referrals.
- The program requires that enrollees attend the adult day health center and use only the plan's providers. Some potential enrollees may find these rules unattractive. (Branch et al. 1995).
- Enrollment is expensive for beneficiaries without Medicaid coverage, who must pay the Medicaid capitation amount themselves as a premium.

Evaluation findings HCFA's evaluation contractor found that PACE had a mixed effect on outcomes (Burststein et al. 1996). Compared to people who applied to PACE but later declined to enroll, PACE enrollees had lower hospital and nursing home use and higher satisfaction. However, the PACE enrollees did not have lower mortality or improve function. Policymakers should view all of these findings with some caution, though, because the outcomes study did not control for the significant differences in health status between the two study groups (Irvin et al. 1997). Potential applicants for whom Medicare spending had been higher and who were closer to death were less likely to enroll in PACE.

Characteristics of enrollees A recent study found the average number of impairments in activities of daily living (ADLs) for all PACE enrollees was 3.9 out of a possible 5, with an average of 2.6 ADL impairments in the East Boston PACE site and 4.8 in the Columbia, South Carolina, site (Mukamel et al. 1998). Further, although some PACE enrollees improved over time (between 11 percent and 14 percent, depending on the time since enrollment), others deteriorated (between 8 percent and 13

percent) or died (between none and 13 percent) over 18 months.

First-generation Social Health Maintenance Organizations: Covering community-based long-term care benefits under Medicare

The first generation of the S/HMO (S/HMO I) program tests a model of service delivery and financing intended to integrate acute, chronic, and long-term care, and social services provided through capitated health maintenance organizations. One way to integrate services is through the benefit package.

S/HMO I plans offer three types of benefits: basic Medicare, expanded benefits (such as prescription drugs and eyeglasses), and community-based long-term care (see Table 5-2). All enrollees are entitled to basic and expanded benefits. Only enrollees determined to be nursing home certifiable under their state's Medicaid standards are entitled to the long-term care benefits, which include intermediate nursing care, homemaker/chore services, personal health aides, medical transportation, adult day health care, respite care, and case management.

TABLE 5-2

Social Health Maintenance Organization site benefit summary: expanded long-term care services

Expanded long-term benefit	Kaiser Permanente Senior Advantage II	SCAN Health Plan	Elderplan
Overall spending cap	Annual maximum of \$12,000 gross for home and communitybased care, nursing facility, dentures, and other covered expanded care	No overall cap	Annual maximum of \$7,800 gross and monthly maximum of \$650 gross, including copayments
Home and community care	Pays 80%, up to \$800/month; member pays 20% up to \$200 per month (\$1,000/month gross benefit)	Pays net after copayment to \$625/month, \$8.50/visit copayment for most services, \$153/month out-of-pocket maximum	Pays balance after copayment, up to \$650/month in gross costs; home care copayment is \$12/visit; adult day care is \$12/day
Nursing facility care (custodial/respite care)	Pays 80%, up to 14 days per period of confinement; 20% copayment	Covers up to 14 days per period of confinement; no copayment, but \$7,500 lifetime limit	Covers 10 days lifetime for nonrespite stays and unlimited respite stays, subject to copayment and \$7,800 annual cap

Note: All sites include in-home personal care and homemaker services, adult day care, in-home and institutional respite, short-term institutional stays, transportation to medical appointments, emergency response systems, foot care, and equipment and supplies. Some sites cover these separately, while others cover them within the expanded care benefit limits. Eligibility for long-term care benefits is based on functional status and need for supervision equivalent to state nursing home preadmission screening criteria.

Source: Social HMO Consortium, March 1999.

S/HMO I has been a demonstration since 1985. In the BBA, the Congress required the Secretary to submit a report in 1999 with a plan for integrating the S/HMO I demonstration into Medicare+Choice.

Operational characteristics The S/HMO I program controls enrollees' use of long-term care benefits. Plans determine continued eligibility for these benefits by reassessing enrollees' health and functional status every 90 days. Enrollees eligible for the long-term care benefits are limited to a maximum plan payment of \$7,500 to \$9,600 per year for these benefits, depending on the site; some sites also have lifetime limits on institutional benefits.

When S/HMO I was conceived, researchers were interested in finding out how pooling public and private funds to finance home and community-based services would affect the quality of life and use of institutional services. But two things have changed. First, researchers since have concluded that greater use of home health services generally does not lead to less use of hospital care (Neu and Harrison 1988). Second, the use of Medicare home health benefits-restricted when the S/HMO I was launched-has expanded greatly through the 1990s.

Another change since 1985 has been the growth in Medicare managed-care enrollment, with the concurrent provision of richer benefit packages at lower cost to

beneficiaries. When the S/HMOs were first implemented, most Medicare HMOs (88 percent in 1988) charged premiums for their basic packages, and most (66 percent in 1988) did not cover prescription drugs (Brown et al. 1991). With greater competition among plans, coverage of prescription drugs with no premium has become the industry standard in many parts of the country.

Both S/HMOs and Medicare+Choice plans in their market areas currently offer similar expanded HMO benefits, but S/HMOs tend to provide broader coverage of prescription drugs (see Table 5-3). All market areas S/HMOs and Medicare+Choice plans serve have at least one plan offering a zero-premium

TABLE 5-3

Social Health Maintenance Organization site benefit summary: S/HMO and Medicare+Choice plans by S/HMO market area

Characteristics	Kaiser Senior	Permanente Advantage II	SCAN Health Plan	Elderplan	Health Plan of Nevada
Number of Medicare+Choice plans in area		6	11	8	5
Medicare+Choice payment rate:					
Counties served by S/HMO					
Minimum	\$382.37		\$446.68	\$733.87	\$393.15
Maximum	\$419.83		\$647.70	\$733.87	\$530.04
Premiums					
Medicare+Choice					
Minimum	\$0	\$0	\$0	\$0	\$0
Maximum	\$96	\$50	\$69	\$70	\$70
S/HMO	\$170	\$0	\$0	\$0	\$0-\$70.45
Prescription drugs					
Medicare+Choice					
Number offering benefit	2	11	7	4	4
Number with unlimited benefit		4	0	0	0
Average total limit	\$600	\$2,350	\$700	\$1,350	\$1,350
S/HMO	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited
Generic drug copayment					
Medicare+Choice					
Minimum	\$0	\$0	\$5	\$4	\$4
Maximum	\$0	\$7	\$10	\$7	\$7
S/HMO					
Minimum	\$5	\$3.50	\$5	\$6	\$6
Maximum	\$5	\$3.50	\$5	\$7	\$7

continued

**TABLE
5-3**

Social Health Maintenance Organization site benefit summary:
S/HMO and Medicare+Choice plans by S/HMO market area (continued)

Characteristics	Kaiser Permanente Senior Advantage II	SCAN Health Plan	Elderplan	Health Plan of Nevada
Vision				
Medicare+Choice				
Number covering eyeglasses, contacts, routine eye exams	6	11	7	3
S/HMO				
Covers eyeglasses, contacts, routine eye exams	Yes	Yes	Yes	Yes
Hearing aid benefits				
Medicare+Choice				
Average amount covered per period	\$725	\$250	\$462.50	NA
Average period (years)	2	3	3	NA
S/HMO				
Amount covered per period	NA	\$300	\$600	NA
Period (years)	NA	2	3	NA
Foot care				
Medicare+Choice				
Number offering foot care beyond Medicare	0	5	5	2
S/HMO				
Offers foot care beyond Medicare	No	Yes	Yes	No
Nonemergency transportation				
Medicare+Choice				
Number offering nonemergency transportation to plan-approved location	2	2	2	1
S/HMO				
Offers nonemergency transportation to plan-approved location	NA	Yes	Yes	No

Note: Averages are for all benefit packages that Medicare+Choice plans offer within an S/HMO market area. Medicare+Choice payment rate is the total of 1999 Part A and Part B payment rates. NA (data not available). Medicare+Choice refers to all Medicare+Choice plans in area, excluding S/HMO. S/HMO (Social Health Maintenance Organization).

Source: Medicare Compare, January 1999 available at www.medicare.gov.

package, while three of the four S/HMOs offer zero-premium options. The exception (Kaiser Permanente Senior Advantage II) charges a high premium (\$170), possibly because of its rich long-term care benefits or the low Medicare+Choice payment rates in the counties it serves. Most Medicare+Choice plans offer outpatient prescription drug coverage, although

most cap their coverage at an annual maximum. In contrast, all S/HMOs have unlimited prescription drug coverage (although their copayments for generic drugs are generally not the lowest in their areas). S/HMOs offer richer hearing aid and nonemergency transportation benefits. Coverage of Medicare post-acute services is similar in S/HMOs and Medicare+Choice plans.¹

In addition to providing expanded benefits and community long-term care, S/HMOs include a case-management component. S/HMO case managers emphasize community-based services and attempt to coordinate institutional and noninstitutional care.

1 The Medicare Compare data do not include enough responses from plans to compare the frequency with which plans offer coverage for skilled nursing facility stays of over 100 days.

Evaluation findings HCFA first evaluated S/HMO I in the 1980s, and a second evaluation is under way. The earlier evaluation found that although S/HMO I successfully offered long-term care services, it did not develop a well-coordinated system of care with acute and chronic medical benefits (Harrington et al. 1993). The principal problem was that S/HMO I projects did not establish successful working relationships between physicians and case managers. Physicians did not change their practice style and remained uninvolved with other participants in the delivery system. Even by the end of the evaluation period, many physicians were unaware of the S/HMO long-term care benefit package. However, case managers successfully managed long-term care resources, with no more than 2 percent of enrollees exhausting their long-term care benefits at any site.

The evaluation found that S/HMO I had mixed effects on outcomes. Researchers found no difference in case-mix standardized mortality rates between the S/HMOs and traditional Medicare. Although the less healthy enrollees were more likely to survive from one period to the next in traditional Medicare, the S/HMOs were somewhat more successful than the traditional program in helping less healthy survivors to return to active life.

The evaluation also found that S/HMO enrollees without functional impairments were more satisfied with their coverage and care than comparable beneficiaries in the traditional program. Enrollees with impairments were less satisfied than either unimpaired S/HMO enrollees or impaired beneficiaries in the traditional program (Newcomer et al. 1994). Other studies report a mix of findings on satisfaction. Some have similar results; others found that S/HMOs were able to satisfy their continuing members and that the S/HMOs' enrollees were as satisfied with their coverage as Medicare beneficiaries in traditional Medicare.

Characteristics of enrollees By design, S/HMOs enroll beneficiaries with and without disabilities. S/HMO I plans initially were allowed to limit the share of enrollees who were nursing home certifiable and would use long-term care benefits, but the plans since have chosen to drop these limits. Medicare beneficiaries younger than age 65 have not been permitted to enroll in S/HMO I plans but are enrolled in S/HMO II. In early 1999, the percentage of enrollees considered nursing home certifiable in the three S/HMO I plans were as follows: Elderplan, 20 percent; Kaiser, 23 percent; and SCAN, 15 percent.

Second-generation Social Health Maintenance Organizations: Focusing on models of geriatric care

The Congress mandated the second-generation S/HMO demonstration in 1990. It is similar to the S/HMO I demonstration in many regards, but it is supposed to improve services, financing methods, and benefit design. HCFA chose six organizations to participate in the second-generation program, but only one, Health Plan of Nevada, has become active. By late 1998, three sites had decided not to develop SHMO II plans, and two others were continuing discussions with HCFA to settle unresolved questions.

One goal of the newer demonstration is to develop S/HMO plans distinct from conventional risk HMOs because they incorporate practices that geriatricians developed into the operations of the plans. These practices include comprehensive geriatric assessment for certain patients, treatment of functional problems, and a team approach that brings together nurse practitioners, pharmacists, and other health care professionals. Case management is not limited to those eligible for long-term care benefits; it is also provided to those with high-risk conditions, evidence of impending disability, or a risk of disability.

EverCare: providing better primary care to nursing home residents

EverCare is a recent demonstration program (started in 1994) that enrolls permanent nursing home residents into managed care. The demonstration builds on the EverCare company's experience subcontracting with Medicare HMOs to provide medical care for enrollees living in nursing homes.

Unlike PACE and S/HMO, EverCare does not expand the Medicare benefit package significantly; instead, the primary focus is to provide more Medicare-covered outpatient services.

EverCare assigns a physician and nurse practitioner to nursing home residents to provide primary care in the nursing home. These providers have expertise in caring for geriatric patients and are to coordinate enrollees' care by developing a treatment plan, providing routine and emergency visits, arranging for specialist visits, communicating with enrollees' families, and overseeing any hospital care. The program provides these services to reduce residents' use of hospital and emergency room care. The demonstration also is intended to improve the quality of care and health outcomes and to develop practice guidelines.

Operational characteristics Although EverCare does not cover such services as prescription drugs or long-term nursing home care, the program does use the flexibility of a capitation payment to shift services among settings. EverCare sometimes increases payment rates to physicians above the Medicare amounts to encourage visits, and it also reimburses physicians for care planning and family conferences. EverCare must pay for skilled nursing care, a Medicare benefit, but plans do not require enrollees to have a three-day hospital stay to use this benefit. The plans have developed a payment scheme for nursing home "intensive service days," used when the homes care for patients who otherwise would have been transferred to a hospital.

EverCare markets to residents of nursing homes through the homes. This practice allows the program to enroll enough patients so that nurse practitioners can spend significant time in the homes. The program prefers to enroll patients of nursing homes where a small number of physicians provides most of the services and is receptive to the EverCare philosophy of care (Kane and Huck 1998). It also prefers to enroll patients living in nursing homes that provide skilled care, so that the program can use these services to substitute for hospital stays.

Characteristics of enrollees All EverCare enrollees are permanent nursing home residents. According to EverCare data, enrollees have an average of four to five impairments in ADLs, and about 80 percent of enrollees have dementia.

Comparing enrollees in programs for frail Medicare beneficiaries with those in Medicare+Choice

The populations overlap in the managed care programs for frail Medicare beneficiaries and in Medicare's main managed care program (formerly known as the risk contracting, or risk program, and called Medicare+Choice starting in 1999). Risk plans (participants in the risk program) enroll some beneficiaries with characteristics similar to those who enroll in specialized programs. PACE and EverCare are open only to beneficiaries who need long-term care. Recognizing the overlap among programs, policymakers will need to strike a balance between recognizing differences among programs and giving all managed care plans the same strong incentives to provide quality health care to frail beneficiaries.

Health plans participating in the Medicare+Choice program enroll beneficiaries who have functional disabilities and those who live in nursing homes (though they tend to enroll relatively fewer frail beneficiaries than the traditional program). In 1996, about 11 percent of Medicare risk plan enrollees

needed help with at least one ADL (MedPAC 1998). The same year, risk plans enrolled 4 percent of all Medicare beneficiaries living in institutions and about 9 percent of all Medicare beneficiaries who reported functional disabilities. To care for these enrollees, some plans use many of the same tools featured in PACE, S/HMO, and EverCare, such as case management, care from nurse practitioners, and enhanced benefit packages (Pacala et al. 1995, Reuben et al. 1999).

Differences in enrollees' characteristics among programs

In the aggregate, enrollees in the three programs for frail Medicare beneficiaries are older and have higher mortality rates than those in Medicare risk plans. Differences are most apparent among PACE and EverCare enrollees (see Table S-4). The population in the S/HMOs is similar to that of traditional Medicare. S/HMO enrollees are slightly older, are slightly more likely to be eligible for both Medicare and Medicaid, and have marginally higher mortality rates than risk plan enrollees. PACE enrollees, by contrast, are significantly older than either S/HMO or risk enrollees, are almost all dually eligible for Medicaid and Medicare, and have much higher mortality rates in each age group, probably indicating a higher burden of illness. EverCare enrollees are the oldest population and are the most likely to die; they are less likely than PACE enrollees to be eligible for Medicaid.

Each of the three programs enrolls beneficiaries with functional impairments, but the severity of these impairments varies by program and by state.

Many beneficiaries move from program to program

Each program attracts enrollees who were in a risk plan at some point after becoming eligible for Medicare, but relatively few enrollees in the demonstration programs disenroll and

later join Medicare risk plans. Of the three programs, S/HMO enrollees are most likely to have been in a risk plan; 70 percent of all S/HMO enrollees have been in a risk plan at some time, with some enrollees moving back and forth between S/HMO plans and risk plans several times (see Table 5-5).

Comparing sponsors of plans in programs for frail beneficiaries with those in Medicare+Choice

Some of the programs for frail Medicare beneficiaries have sites sponsored by risk plans, making the need for careful design of payment methods and program standards all the more important. It is entirely appropriate for managed care plans to develop innovative care management techniques for a targeted population through a demonstration or under the Medicare+Choice program. However, to the extent that the same entities participate in multiple programs with different payment methods or program standards, the potential exists for exploiting the differences. For example, if the Secretary designed a payment system for specialized programs that paid more for a beneficiary in a S/HMO than for the same beneficiary in a Medicare+Choice plan, an organization with both a S/HMO and a Medicare+Choice contract would have a strong incentive to enroll that beneficiary in the S/HMO to receive a higher payment.

Of the four operational S/HMO sites, two--Kaiser Permanente Northwest and Health Plan of Nevada--are sponsored by HMOs that also contract with Medicare under the Medicare+Choice program. Three of the 21 PACE plans operating in February 1999 were offered by health systems that also had a Medicare HMO. EverCare is a subsidiary of United HealthCare, a major managed care company with multiple Medicare+Choice contracts. EverCare operates demonstration sites and subcontracts with Medicare+Choice plans in several cities.

**TABLE
5-4**

Selected demographic information on enrollees in Medicare programs for frail Medicare beneficiaries, 1997

Category	PACE	S/HMO	EverCare	Risk	Traditional Medicare program
Number of enrollees (in thousands)	4	59	7	5,900	31,800
Annual increase in enrollees (1994-97)	22.9%	44.4%	257.5%	33.3%	0.6%
Age (distribution in percent):					
<65	4%	6%	1%	12%	17%
65-74	24	49	12	54	44
75-84	40	35	37	28	29
85+	33	10	50	7	10
Enrollees with Medicaid eligibility	96%	5-6%	70-75%	5%	16%
Mortality rate by age					
<65	10%	2%	22%	2%	3%
65-74	12	3	21	2	3
75-84	14	6	30	5	7
85+	18	15	36	13	17

Note. PACE (Program of All-Inclusive Care for the Elderly), S/HMO (Social Health Maintenance Organization).

Source: MedPAC analysis of data from the HCFA Group Health Plan Master and Denominator files and programs.

Medicare risk adjustment and specialized plans

The BBA mandated that HCFA develop a new system of risk adjustment for Medicare+Choice plans. Risk adjustment makes Medicare payments to plans more accurately reflect predictable differences in plan health care spending on behalf of enrollees. Risk-adjusted payments are more equitable across plans and allow resources to follow the people who will need the most care.

Risk adjustment increases payments for beneficiaries whose health would lead to predictably higher spending by plans in which they are enrolled. This reduces incentives for plans to avoid enrolling them or to encourage them to disenroll. Risk adjustment should lead to less risk

selection (enrollment of relatively healthy beneficiaries) and encourage plans to compete on the basis of how effectively they manage care rather than on how successfully they attract favorable risks.

MedPAC has considered whether HCFA should use methods developed for Medicare+Choice to pay plans participating in programs for frail Medicare beneficiaries. In general, the Commission believes that Medicare's capitation payments should follow beneficiaries into any managed-care plan they select, regardless of its special features. This policy would give all plans incentives to provide good care for frail beneficiaries and would encourage innovation in care for beneficiaries with functional disabilities.

MedPAC also recognizes, however, that the risk adjustment methods planned for use in 2000 for Medicare+Choice and considered for use in 2004 are inadequate predictors of the cost of care for frail Medicare beneficiaries.

Health plans such as those in Medicare+Choice generally serve a wide cross-section of beneficiaries and may be able to offset low payments for the care of some enrollees with higher payments for the care of others. Conversely, programs designed to serve frail Medicare beneficiaries have limited opportunities to average payments to meet the high costs of care these beneficiaries may require. For this reason, the Commission supports the Secretary's decision to exclude PACE, S/HMO, and EverCare temporarily from the risk adjustment methods being introduced for

**TABLE
5-5**

Medicare beneficiaries' enrollment in multiple managed care programs at some time

Program	Number of beneficiaries	Percentage in program
PACE	6,864	
PACE only	5,871	86%
PACE and risk	993	14
S/HMO	98,016	
S/HMO only	29,026	30%
S/HMO and risk	68,990	70
EverCare	9,673	
EverCare only	8,709	90%
EverCare and risk	964	10

Note: PACE (Program of All-Inclusive Care for the Elderly), S/HMO (Social Health Maintenance Organization) Number of beneficiaries counts all beneficiaries ever enrolled in the programs. EverCare data are for demonstration sites only.

Source: MedPAC analysis of Group Health Plan Master file from the Health Care Financing Administration, April 1998.

Medicare+Choice in 2000. We believe that the Secretary should study the differences between frail and other Medicare beneficiaries to understand the factors affecting costs of care. This examination would help her determine whether changes are needed to improve Medicare+Choice claims-based risk adjustment for frail beneficiaries. If an improved adjuster is developed, the Secretary should use it for all frail beneficiaries. The Commission realizes that data limitations may require applying such an adjuster only to specialized plans in the short run and to all Medicare+Choice plans later.

We encourage the Secretary to consider information about functional status of beneficiaries with information about diagnoses and service use for characterizing, managing, and paying for care. State Medicaid programs already use information about functional status to determine nursing home eligibility, and Medicare will use this information for payments to skilled nursing facilities and home health agencies. We believe the Secretary should encourage plans to begin collecting such data, with encounter data, routinely.

This section reviews information on the performance of available risk adjustment methods when applied to frail beneficiaries in the community and in institutions. It discusses implementation issues such as data availability, reliability, and manipulation of information to increase payment (also called gaming); presents evidence on cost-effectiveness and risk selection in specialized plans for frail beneficiaries; and includes background information on current Medicare payment methods for PACE, S/HMOs, and EverCare.

Risk adjustment alternatives

Specialized plans differ from Medicare+Choice plans in several ways that, in combination, may justify special payment methods for beneficiaries in these plans:

- Specialized plans enroll disproportionate numbers of certain frail Medicare beneficiaries.
- Care for the beneficiaries enrolled may be significantly more expensive than for average Medicare+Choice plan enrollees.

- Specialized plans offer distinctive services of value to Medicare beneficiaries but costly to plans.
- Risk adjustments planned for Medicare+Choice do not accurately match payments to costs for the care of frail Medicare beneficiaries.

Risk adjustment methods generally use information from one or more years to forecast expected costs in the subsequent year. Such methods are intended to yield payment rates that match the expected costs of care for beneficiaries in different health status categories.

Several risk adjustment models might be used with frail Medicare beneficiaries. They vary in design, data requirements, performance, gameability, and other features. The most promising are diagnostic models based on claims data and functional and health status models based on data from clinical records or surveys.

Claims-based models use diagnostic information from claims or similar data submitted by providers to estimate the expected costs of enrollees. Models such as principal inpatient diagnostic cost groups (PIP-DCG) and hierarchical coexisting conditions (HCC) use reported diagnoses to classify patients by risk category. The models use information on the relative costliness of caring for patients in different diagnostic categories to estimate future resource use.

Other models use information on patients' functional status and self-reported health status to forecast resource use. Functional status information can be collected from either clinical records or by survey, and self-reported health status data can be collected by survey only. Functional status models use measures of impairment, generally reflecting performance of ADLs or instrumental activities of daily living (IADLs). ADL limitations indicate difficulty, or a need for help, in activities necessary for basic physical functioning, such as bathing or dressing, whereas IADL impairments

reflect difficulty or need for help in activities required for functioning, such as housework or managing money. Health status models use information such as respondents' assessments of their own health (for example, poor, fair, good, very good, or excellent, compared with others, of the same age) or information from a survey instrument such as the Short Form 36 (SF-36). The SF-36 is a questionnaire that collects information on persistent or recurring physical, social, and emotional dysfunction, as well as attitudes and concerns about health and efficacy of medical care (Ware and Sherbourne 1992).

Performance of models applied to all beneficiaries

Research indicates that claims-based models provide better overall explanatory power than models based on self-reported health status or functional status measures alone for the general population. The PIP-DCGs, which HCFA plans to use for Medicare+Choice risk adjustment from 2000 through 2003, perform relatively well overall, but they underestimate costs for beneficiaries with disabilities (see Table 5-6).² HCCs, which HCFA may use for risk adjustment starting in 2004, perform better for these groups but still underestimate costs. Adding variables measuring functional status and self-reported health status improves the performance of both PIP-DCGs and HCCs for beneficiaries with disabilities.

The performance of claims-based models varies by subgroup. The PIP-DCGs significantly overestimate costs of care for people who have no difficulty with ADLs and underestimate costs of care for people who have difficulty with one or more ADLs, with underestimates of almost 30 percent for people who have difficulty with five or six ADLs. HCCs have similar, but much smaller, predictive

TABLE 5-6

Predictive ratios for alternative risk adjustment models by validation subgroup

Validation groups	PIP-DCG	PIP-DCG and health and functional status	HCC	HCC and health and functional status
Institutional status				
Non-institutionalized	1.01	0.99	0.99	0.98
Institutionalized	0.88	1.16**	1.12	1.27***
Functional status				
5-6 ADLs	0.72***	1.06	0.88*	1.08
3-4 ADLs	0.74***	0.94	0.85*	0.95
1-2 ADLs	0.85***	1.03	0.90**	1.03
IADLs only	1.06	0.97	1.04	0.96
None	1.30***	0.98	1.16***	0.98
Elderly helped with 3+ ADLs				
	0.70***	0.96	0.88*	1.00

Note: Predictive ratio is the ratio of spending predicted by the model to actual spending [A predictive ratio closer to 1.00 indicates better prediction.] Predictive ratios of each group normalized by dividing by the predictive ratio of the overall sample. ADL (activity of daily living), IADL (instrumental activity of daily living), PIP-DCG (principal inpatient diagnostic cost group), HCC (hierarchical coexisting conditions).
 *** Predictive ratio is significantly different from 1 at the .01 level.
 ** Predictive ratio is significantly different from 1 at the .05 level.
 * Predictive ratio is significantly different from 1 at the .10 level.
 Data are 1992 (Round 4) and 1993 (Round 7) Medicare Current Beneficiary Survey

Source: Pope GC, Adamoche KW, Walsh EG, Khondker RK. Evaluating alternative risk adjusters for Medicare. Waltham (MA), Center for Health Economics Research. Report to the Health Care Financing Administration under cooperative agreement no. 17-C903 16/102 1998

errors—no more than 15 percent for people who have difficulty with three or four ADLs and a lower percentage for those who have difficulty with five or six ADLs.

Risk adjustment under Medicare+Choice will use a modification of the PIP-DCG method.³ This modified PIP-DCG system still underpays—by as much as 39 percent—for beneficiaries with spending in the top 5 percent and by as much as 11 percent for those with any chronic condition (HCFA 1999a). The modified PIP-DCG model's predictions are essentially the same as the basic PIP-DCG model for all ADL groups except for elderly needing help with three or

more ADLs. For these beneficiaries, predictions improve modestly from an underestimate of 30 percent to an underestimate of 23 percent (Table 5-6 and Pope et al. 1999).

Adding health and functional status to risk adjustment models improves the predictive ability of claims-based models for beneficiaries with disabilities. Adding health and functional status information gives models that accurately forecast spending for all beneficiaries who have difficulty with ADLs and for elderly needing help with three or more ADLs.

² Table 5-6 presents predictive ratios (ratios of predicted to actual spending, normalized by dividing by the model's ratio for the entire sample), for selected risk adjustment models and demographic groups. The table indicates those ratios for which the difference from one is statistically significant.

³ The base payment amount is paid for diagnoses that represent minor or transitory diseases or disorders, are rarely the main cause of an inpatient stay, or are classified by HCFA as "vague or ambiguous." It is also paid for diagnoses reported as a result of a short hospital stay (one day or less). Adjustments are included for aged beneficiaries originally entitled by disability, for Medicaid enrollment in any single month during the diagnosis year, and for working-aged status (HCFA 1999a).

Performance of models applied to institutionalized beneficiaries

Models perform differently for institutionalized and for all beneficiaries. Models including demographic characteristics underpredict spending for the institutionalized while SF-36-type and functional status models overpredict it (Pope et al. 1998).

PIP-DCGs and HCCs predict payments well for the institutionalized. Adding health and functional status to these models leads to overpredicting payments for the institutionalized (see Table 5-6).

HCFA presented analyses in 1997 indicating that the adjuster for institutional status used in the adjusted average per capita cost (AAPCC) payment system was higher than warranted by current data, so the agency proposed to reduce the adjuster. After passage of the BBA, the agency concluded that provisions of the new law and planned implementation of risk adjustment in 2000 made it inappropriate to change the AAPCC payment factors.

HCFA will phase out the adjuster for institutional status with the introduction of the new Medicare+Choice risk adjustment system. The agency notes that though total Medicare spending for beneficiaries in skilled nursing facilities is relatively high, spending for those in other long-term care facilities (nursing homes, intermediate care facilities for the mentally retarded, and mental health facilities) is not (HCFA 1999a). The modified PIP-DCGs scheduled for use with Medicare+Choice would pay accurately for the care of institutionalized beneficiaries such as those served by EverCare (Pope et al. 1999).

Industry representatives have raised concerns that the data used to test the modified PIP-DCG system in predicting the costs of institutionalized beneficiaries are flawed because they do not capture the full spending experience of nursing home residents. Further, they demonstrate that the costs to Medicare of an institutionalized beneficiary vary significantly over the course of the

nursing home stay; costs are high in the first six months of nursing home residence and decline gradually over time (Gruenberg 1999). This finding warrants further study of whether the performance of PIP-DCGs might vary depending when the beneficiary was admitted to the home.

Implementation issues

The availability of data was a principal concern of HCFA in choosing a risk adjustment system for Medicare+Choice. It also will be a major concern in choosing a risk adjuster for frail Medicare beneficiaries, including those in specialized programs. Because information about functional and health status is not now included on claims forms or in the encounter data collected from all Medicare+Choice plans, supplemental data collection would be necessary. HCFA would need information from continuing surveys, such as the Medicare Health Outcomes Survey (HOS, formerly the Health of Seniors survey) or the Medicare Current Beneficiary Survey, new surveys, or possibly data from plan administrative records or member medical records. However, the method for calculating Medicare+Choice rates requires data on traditional Medicare beneficiaries at the county level. This method would require surveys of Medicare beneficiaries in the traditional program.

Reliability

Reliability of reported data is also a concern. Although fee-for-service (FFS) claims data are considered generally reliable (but the Department of Health and Human Services Office of Inspector General still reports substantial overpayments because of data errors), information from managed-care organizations is considered less reliable than corresponding FFS data because many of these organizations are relatively new to processing claims data and payment has not been tied to data quality. These limitations also will hinder efforts

to refine claims-based models using managed-care data rather than the FFS data with which they were developed.

Health status data raise questions of the reliability and appropriateness of using self-reported data in a payment system, as does functional status if self reported. Many frail beneficiaries are cognitively impaired, and information may be provided by such proxies as adult children or spouses. The use of either health or survey-collected functional status measures in a risk-adjustment model could make payment dependent on subjective self-reported information. Alternatively, nurses or physicians could assess functional status, and plans could include this information with encounter data submitted to HCFA. These clinical assessments, while subject to clinical error, are not subject to error of self-report.

Data availability

HCFA does not now have self-reported health status or functional status data for all Medicare beneficiaries. However, information on functional status is collected by specialized plans, from a representative sample of Medicare+Choice enrollees, and for some users of post-acute care. PACE plans routinely collect functional data on enrollees. S/HMO plans send a health status form to each member annually, and plans complete a comprehensive assessment form for each member eligible for long-term care benefits. S/HMO I plans consider ADL or IADL information when screening for nursing home certifiability, and then systematically collect and regularly update ADL and IADL information for enrollees found to be nursing-home certifiable (based on data from Kaiser Permanente and Elderplan). EverCare collects and updates ADL information. HCFA currently is not requiring Medicare+Choice plans to include such information with the encounter data they must submit.

The cost and complexity of collecting data from all plan members may lead HCFA to collect data by survey. (HCFA

estimates that the cost of collecting functional status information would equal the cost of collecting the full array of encounter data). If HCFA chose to use a new survey to develop data for use in risk adjustment, it would need a way to ensure a representative sample of adequate size for each plan.

If HCFA chose to collect health and functional status information with an existing survey, it might consider using or modifying the Medicare Health Outcomes Survey. HCFA is collecting HOS data from a sample of enrollees in most Medicare+Choice, PACE, S/HMO, and EverCare plans. The HOS is built on the SF-36 survey instrument, which has been used to monitor health, evaluate outcomes, and provide external performance measurement of health plans. It is possible to infer some functional information from SF-36 responses, and the HOS instrument includes explicit questions about ADL and IADL limitations.

One way of collecting functional status assessments would be to use existing plan records. Specialized plans already might be able to report ADL and IADL information from the assessments they do. Medicare+Choice plans currently do not systematically collect such information, but HCFA could require them to collect such data and to include them as part of the mandated submission of encounter data to HCFA. It could encourage plans to view functional status information as valuable clinical information, on a par with diagnosis information. Systematic collection of ADL and IADL information from plan records would impose new costs on plans and on HCFA. However, it would overcome issues of sample design, cost, and data reliability inherent in efforts to collect such information by supplemental survey. As an alternative to requiring submission of data, plans might report disability measures voluntarily.

Implementation of broader risk-adjustment measures would require information at the county level on

beneficiaries in the traditional program. The current capitation system makes payments at the county level. The county rate is the Medicare payment for a beneficiary with the national demographic profile. HCFA calculates this county rate by dividing the county rate by average risk factors in the county. Plan payments for each Medicare+Choice enrollee equal the risk factor for that enrollee multiplied by the county rate.

Risk factors under the old system are demographically based and, under the interim Medicare+Choice risk-adjustment system, will be PIP-DCG risk-adjustment weights. HCFA calculates the new risk-adjusted county rates from the 1997 rates, as mandated by the BBA. It multiplies the 1997 county rates, standardized by the demographic factors, by county-specific values that convert them into rates standardized by PIP-DCG factors. A similar calculation would be required if a functional status risk adjuster were used, with county functional status risk weights used in place of PIP-DCG weights. HCFA must have information to calculate risk-adjustment factors for beneficiaries in the traditional program in each county to convert 1997 rates into rates based on the new risk-adjustment system.

Risk-adjustment systems that use information from administrative databases are the least expensive to implement, because they do not require new data collection. This has been a primary advantage of risk adjusters that use beneficiary age and sex. The new Medicare+Choice risk-adjustment system that uses inpatient hospital diagnoses has required new data collection from Medicare+Choice plans, but information on the population in the traditional program in each county already is available on hospital bills.

HCFA believes that one problem with moving to a risk-adjustment system that incorporates information about risk from functional assessments or surveys is that

the system would need both from plans and data from beneficiaries in the traditional program. These data would be necessary to standardize national risk adjusters for use with county data. However, it would be possible to develop a national or state adjuster based on a sample and apply it regardless of county differences in functional status. Some functional status information will be collected in the traditional program as part of the case-mix adjustment systems to be used for skilled nursing and home health care prospective payment systems. This information will be incomplete, however, because it will include only functional status information for beneficiaries who use these services.

Manipulating data to increase payments

HCFA will have to pay attention to the possibility of gaming in any risk-adjustment system. If data were collected directly from plans, the organizations might manipulate the data reported. If data were collected by survey, plans might influence which members were included in a sample and how beneficiaries responded to questions. The problems are greater than with claims data because functional status information is more difficult to audit. Incentives to increase the number and type of ADLs and IADLs reported, as with any characteristic with which payment is associated, may be high. If HCFA makes higher payments for beneficiaries with certain characteristics, information on traditional Medicare beneficiaries suggests that the reward for reporting additional disabilities would be great. In the traditional program, spending on care for beneficiaries with one or two ADL impairments is three times the spending for those with none. It is one-third higher for those with three or more ADL impairments compared to spending for those with two (Komisar et al. 1997/1998).

Risk-adjustment recommendations

RECOMMENDATION 5A

The Secretary should study factors affecting the costs of care of frail beneficiaries and all other Medicare beneficiaries to determine if changes are needed to improve Medicare+Choice claims-based risk adjustment for frail beneficiaries. This study should identify data needed to support improvements in the Medicare+Choice risk adjustment system.

The Secretary should continue research into factors that affect the cost of care of Medicare frail beneficiaries and other beneficiaries. This research will help HCFA determine whether modifications of Medicare+Choice risk adjusters are necessary for payment for the care of frail beneficiaries and will help in the design of modified adjusters.

It may be possible to refine existing claims-based risk adjusters, such as PIP-DCGs and HCCs, to make them more sensitive to the differences between frail and other Medicare beneficiaries. An alternative would be to develop risk adjusters based on clinical assessments of functional status collected from plan records, by survey, or by a combination of these methods.

The Commission anticipates that risk adjusters based on clinical assessments of functional status would be combined with claims-based adjusters applied to other Medicare+Choice plans. Data collection costs may be high for developing and implementing risk adjusters not based on claims. HCFA should explore all opportunities to collect necessary data from plan records to reduce costs of data collection and increase data reliability. It also should explore alternatives for collecting similar data in specialized plans, Medicare+Choice plans, and traditional Medicare to permit comparisons of cost and performance in care for all frail Medicare beneficiaries.

RECOMMENDATION 5B

The Secretary should evaluate the use of partial capitation payment approaches for frail Medicare beneficiaries in specialized and Medicare+Choice plans.

HCFA could combine risk adjustment for frail Medicare beneficiaries with basing payments in part on actual services used. The Commission recommends that the Secretary evaluate a system of partial capitation payment to specialized and Medicare+Choice plans for care to frail Medicare beneficiaries.

In its simplest form, plans paid by partial capitation would submit claims for all services. Plans would receive both a reduced traditional Medicare payment and a reduced capitation rate in some actuarially fair combination. This approach would reduce the loss from enrolling beneficiaries whose costs of care were above the risk-adjusted capitation rate and the profit from those with costs of care below it. By reducing the profit from attracting good risks, this approach would provide greater resources for frail beneficiaries with relatively high costs of care. It would discourage underprovision of care by providing positive payments for all additional services.

Partial capitation complements risk adjustment and may be especially useful in situations—such as care for frail beneficiaries—where existing methods do not predict costs accurately. Partial capitation payments, based partly on actual services used, are on average closer to costs than capitation payments based on risk adjusters that do not predict costs well. By protecting plans from underpayment, partial capitation makes it possible to implement risk adjustment with existing methods as research continues to develop improved adjusters.

Partial capitation would reduce a plan's overall financial risk and would be useful for plans with low enrollment. It might be

suitable for plans such as PACE sites, which generally have fewer than 500 members.

Finally, partial capitation provides information on use of services in capitated plans that would strengthen the ability to refine capitation payments. It would provide an incentive to report the information accurately.

Partial capitation has some drawbacks, and it raises issues unique to specialized plans. It introduces fee-for-service incentives in the managed care setting, reducing incentives to control costs and leading to possible management problems. Specialized plans seek to substitute services Medicare does not cover for those that are covered (for example, home- and community-based care for nursing facility care). If partial capitation payments do not include both covered and noncovered services, plans would be encouraged to substitute covered services (which would increase their partial capitation payments) for noncovered services (which would not increase them), seriously undermining the objectives of these programs. On the other hand, including noncovered services in partial capitation payments would constitute an expansion in Medicare-covered services presumably not intended by Congress. Including services in partial capitation payments also would require calculating fee-for-service rates for all the plans' services. While this calculation for covered services can use payment rates in traditional Medicare, it would be necessary to develop rate schedules for noncovered services for which no Medicare payment rates exist.

RECOMMENDATION 5C

The Secretary should postpone by at least one year the application of the interim Medicare+Choice risk adjustment system to specialized plans. Plans should be paid using existing payment methods until a risk adjustment or other payment system is developed that adequately pays for care for frail Medicare beneficiaries.

The Secretary plans to delay application of PIP-DCGs to specialized plans in 2000 and to continue paying them using the current modified Medicare+Choice payment rate methods. The Commission supports a postponement, pending the results of HCFA's study of risk adjustment options for populations specialized plans serve. HCFA will work with specialized plans to acquire encounter data based on both claims and surveys, including inpatient, outpatient, and physician data, as well as functional status information.

RECOMMENDATION 5D

In the long term, the Secretary should set **capitation** payments for frail beneficiaries based on their characteristics, not the type of plan to which they belong.

Risk adjustment and payment should follow the beneficiary and not be tied to the plan. Making risk-adjusted payments for frail beneficiaries regardless of plan would encourage plans to enroll them and to introduce innovations in their care. HCFA should consider adding functional status information to the encounter data it requests from Medicare+Choice plans in preparation for implementing comprehensive risk adjustment in 2004. These data will permit HCFA to develop adjusters using functional status measures and to test the performance of claims-based adjusters for groups such as frail, functionally impaired beneficiaries.

The Commission recognizes, however, that the Secretary's ability to have payments follow enrollees regardless of plan type is constrained by data availability. Modified risk adjusters may use functional status and health status information not routinely collected by Medicare+Choice plans. Because specialized plans collect functional status information for purposes such as case management and determining nursing home certifiability, they might be able to implement risk adjustment methods using such data before Medicare+Choice

plans are able to do so. This activity could combine with a voluntary, phased-in collection of functional status information and its use in payment in Medicare+Choice generally.

Evidence on cost effectiveness and risk selection in specialized plans

Ample evidence suggests that the presence of disabilities is associated with higher costs of care among beneficiaries in the traditional Medicare program (Komisar et al. 1997/1998, Gruenberg et al. 1996, MedPAC 1998). Data from the Medicare Current Beneficiary Survey (MCBS) indicate that beneficiaries in the traditional program who resemble PACE, S/HMO, and EverCare enrollees have higher spending than others (Gruenberg et al. 1999).⁴ An independent effort to identify a PACE-like population using MCBS and National Long Term Care Survey data found evidence that the care of nursing home-certifiable, frail beneficiaries might cost about twice as much as the care of average Medicare beneficiaries (Center for Health Systems Research and Analysis 1998).

It is difficult to compare directly the costs of care for beneficiaries in specialized plans, Medicare+Choice plans, and traditional Medicare, because reliable and comparable cost data for all three sites of care are not available. Most studies that attempt to make comparisons identify beneficiaries in the traditional Medicare program with characteristics similar to those of enrollees in specialized plans. They then compare Medicare spending for these individuals with spending for other beneficiaries in the traditional program. One study, however, using actual S/HMO and risk plan expenditure data for 1989-1990, found that spending on all services was 20 percent to 22 percent higher for S/HMO members than risk HMO members, and spending on services covered by both plans was 18

percent to 19 percent higher. These results control for demographic, income, and other factors, indicating that S/HMOs do not succeed in substituting services not covered by Medicare for covered services within a given budget (Dowd et al. 1998).

In the traditional program, Medicare spends more on care for institutionalized beneficiaries than for those not institutionalized. Analysis of MCBS and state data indicates that care for long-term nursing home residents is relatively inexpensive, compared with care for new entrants (Gruenberg et al. 1999), and HCFA analysts note variation in spending levels among post-acute and various long-term care facilities (HCFA 1999a). These findings suggest the average cost of care for EverCare enrollees will depend on the mix of long-term residents and new entrants.

Though PACE, S/HMO, and EverCare plans enroll a high proportion of frail Medicare beneficiaries who are undoubtedly much more expensive than the average beneficiary, these plans might attract a somewhat different profile of frail beneficiaries than in the traditional program. Features of these programs may influence the mix of frail beneficiaries who join. The requirement to use plan providers, for example, may be unattractive to beneficiaries who have strong ties to out-of-network doctors and who may prove to be the sickest patients. A program such as PACE, with a strong Medicaid component, may be unattractive to wealthier beneficiaries.

There is evidence of a different enrollee mix in the PACE and S/HMO demonstrations. The PACE evaluation compared PACE enrollees to those who applied and were found eligible but who then declined to enroll in PACE ("decliners"). One study found significant differences between these groups: decliners were more likely to be in their last three months of life or in the top quartile of prior

4 Cost of care of traditional Medicare beneficiaries provides information on what Medicare would pay if enrollees in specialized plans were enrolled instead in traditional Medicare. It indicates the volume of resources required to treat beneficiaries' health problems. Because specialized plans offer different mixes of services and may operate with different levels of efficiency, cost in the traditional program will not be a measure of the costs to Medicare or costs in total when beneficiaries are enrolled in such plans.

Medicare payments (Irvin et al. 1997). These differences indicate that PACE enrollees are less likely to use services than PACE decliners. Other analysts report that characteristics of PACE enrollees (for example, the relatively favorable experience of enrollees living alone) differ from those of other elderly populations and suggest the possibility of favorable selection. The analysts conclude that it may be inappropriate to generalize results from one population to the other (Mukamel et al. 1998).

Another study for the evaluation that attempted to control for the substantial differences between enrollees and decliners found that capitation payments from Medicare for PACE enrollees were lower than traditional program spending on PACE decliners (White 1998). The author concluded that this finding reflected effective substitution of medical, social, and supportive services for more costly hospital inpatient and nursing home care rather than unmeasured differences between enrollees and decliners. However, the design of this study does not permit understanding of how PACE enrollees compare to the more general population of frail beneficiaries in the traditional program.

Studies by S/HMO evaluation researchers produced inconsistent findings, with early results indicating no favorable selection by S/HMO plans and later work, using different methods, finding evidence of favorable selection. The final evaluation report of the S/HMO demonstration concluded that the S/HMO I projects experienced favorable selection because enrollees who were healthier than the average enrolled in these plans while sicker patients disenrolled (HCFA 1996a). (The S/HMO demonstration was structured to limit the enrollment of functionally impaired people to avoid adverse selection against the plans.) In one study, three of four plans enrolled a population healthier than a comparison group of traditional Medicare beneficiaries. Voluntary disenrollment resulted in favorable selection compared to traditional Medicare (Manton et al. 1994).

Current payment methods for specialized plans

Medicare makes capitation payments to specialized plans supplemented by Medicaid funds for dual eligibles and by private premiums for those without Medicaid coverage. For beneficiaries enrolled in the PACE program, plans receive the Medicare+Choice base payment rates for the counties where enrollees reside multiplied by a frailty adjuster of 2.39. Medicaid policies vary by state (see Appendix B).

Before the BBA changed base payment rates, S/HMOs received a fixed capitation payment equal to the adjusted average per capita costs for the county where enrolled beneficiaries reside (compared with the 95 percent of this amount allowed for risk plans). HCFA recalculated these amounts to reflect changes to the base payment rate under the BBA. The agency also modified the risk adjusters to the base payment. Initially, HCFA paid the rate for institutionalized enrollees for all nursing-home certifiable enrollees,

regardless of whether enrollees were in institutions. Later, the program changed the adjustment to a cost factor for nursing-home certifiable enrollees by analyzing data from the National Long Term Care Survey. Rates for nonnursing home certifiable S/HMO enrollees were lowered to reflect their comparatively better health.

EverCare demonstration sites originally were paid 100 percent of the AAPCC. This share was reduced to 95 percent in the second year and then to 93 percent. These amounts now reflect changes to the base payment rate under the BBA. Because EverCare enrollees are all nursing home residents, payment rates incorporate the adjuster that increases Medicare+Choice payments for institutionalized beneficiaries. This adjuster, which varies by age and sex, will be phased out for Medicare+Choice plans between 2000 and 2003. ■

Program standards

As with payment methods, Medicare should carefully consider the rationale for varying standards among programs, particularly given that considerable overlap exists among the types of beneficiaries in different plans and the organizations that sponsor those plans. On the one hand, standards designed to protect beneficiaries probably should apply consistently across programs. On the other hand, Medicare determines what makes these programs different from one another—and from the Medicare+Choice and traditional programs—through statutory and regulatory standards and the degree of flexibility specialized programs have to pursue innovations. This section describes standards for programs for frail

Medicare beneficiaries and considers where standards should differ from those for Medicare+Choice.

Educating beneficiaries about their choice of plans

The BBA and earlier initiatives started by the Secretary have led to a new framework for Medicare+Choice that is intended both to move the program toward acting as a prudent purchaser and to support beneficiary choice (see Chapter 4). Medicare now takes an active role as a distributor of comparative information about health plans—including benefits, premiums, and performance measures—through numerous mechanisms prescribed by the Congress. Ideally, requiring plans to report information on performance and then providing that information to

beneficiaries will encourage them to choose the plans that best meet their preferences. Then, plans will have an incentive to compete to provide better benefits and service and higher-quality care. Medicare also can use the information about plan performance in its oversight.

Since 1997, HCFA has required plans to report Health Plan Employer Data and Information Set (HEDIS) measures, including the HOS. Although none of the process measures in HEDIS focuses specifically on frail Medicare beneficiaries, some may be relevant to the health problems of these beneficiaries. The HOS elicits enrollees' perceptions of their health status and asks about their functional limitations, and it is intended to measure changes in health and functional status over time. HCFA also requires plans to arrange a survey of their enrollees' satisfaction and report the results to HCFA.

Several HEDIS and enrollee satisfaction measures thought to be most relevant to consumers are now available on the Internet through the "Medicare Compare" database (see Table 5-7). They also are published in the *Medicare & You* handbook and are printed separately on request from a toll-free telephone line. Problems with the information collected should improve somewhat with the auditing requirement for future measures.

The audits will check the accuracy of data to the origin of collection, although problems with completeness and accuracy will persist despite auditing, particularly given the reliance on paper records.

It might seem attractive to fold S/HMO, PACE, and EverCare directly into the Medicare+Choice information campaign so that beneficiaries could compare benefits and plan performance. This approach might make sense for the S/HMOs, particularly because they draw enrollees from the general population and one of the primary differences between Medicare+Choice and the S/HMOs is the benefit package.

Including PACE and EverCare in the Medicare+Choice materials could lead to problems, however, because these programs do not draw from the general population. Because PACE and EverCare enrollees must meet state nursing home eligibility criteria, including these programs in the Medicare+Choice materials might lead to an unwieldy number of inquiries from beneficiaries ineligible for the programs. A disproportionate share of beneficiaries choosing such plans as PACE and EverCare also are cognitively impaired and unlikely themselves to use the complex information comparing plans.

When family members make decisions on behalf of beneficiaries, they likely will be most interested in distinctive features and capabilities of programs that offer coverage of long-term care or enhanced primary care in long-term care settings. Though comparative information about benefits and cost sharing would be useful for choosing among programs (and among plans if more than one was available), the performance measures developed for the general Medicare population probably are less relevant to the intensive needs of frail beneficiaries. Measures also are unlikely to provide sound information for comparing the programs, because the case mix of beneficiaries enrolled in PACE and EverCare is very different from that of the general population and because the number of enrollees at a given plan is low. One approach that merits study is to report satisfaction and other indicators for the subgroup of enrollees who have functional disabilities and to report these indicators consistently across all plans.

Performance measures for programs serving frail Medicare beneficiaries

Though current measures of plan performance may not be as useful in supporting consumer choice, because many potential enrollees are unlikely to

TABLE 5-7

Selected performance measures available on Medicare Compare for Medicare+Choice and Social Health Maintenance Organization plans, 1999

Measure	Average for California	SCAN S/HMO	Average for Nevada	Health Plan of Nevada S/HMO	Average for New York	Elderplan S/HMO
Women who received a mammogram in last two years ^a	72%	39%	62%	60%	75%	46%
Plan members seen by a provider in the past year ^a	77	72	90	94	90	91
Providers who stayed in the plan at least a year ^a	90	73	81	81	93	100
Members rating their plan as the best possible managed care plan	45	45	NA	NA	49	53
Members' satisfaction with ease of getting referrals	86	85	NA	NA	95	96

Note: Separate scores for Kaiser Permanente Northwest's S/HMO were not in the database. S/HMO (Social Health Maintenance Organization). ^aBased on unaudited data. NA [not available].

Source: Medicare Compare at <http://www.medicare.gov>, March 31, 1999.

understand the measures or find them relevant, performance measurement can serve other purposes. Medicare and other purchasers that might pay these plans' premiums could use these measures to evaluate the plans--comparing them to one another and over time. Measures of quality, access, and cost also could support plans' internal quality improvement programs and be shared with providers to help them improve their performance.

Because the purpose of specialized programs for frail Medicare beneficiaries also has been to test innovations such as providing enriched benefit packages, coordinating care, emphasizing case management, and requiring adult day health care, measures for these programs ideally should reflect these innovations' effects. The Medicare program and Medicare+Choice plans looking for tools to manage the care of their frail enrollees can benefit from information that indicates whether these innovations are cost-effective and provide better care outcomes. Other purchasers with frail

enrollees, such as Medicaid programs, also should find this information valuable.

Performance measures for programs for frail Medicare beneficiaries should be relevant, scientific, and operationally feasible. Developing measures for comparing plan performance across type—Medicare+Choice, PACE, EverCare, and S/HMO—might be useful but only if they were relevant to frail Medicare beneficiaries. Other considerations suggest a need for at least some specialized measures for these programs. These considerations include the cost of producing HEDIS measures, compared with their relevance for frail populations and how to compare plan performance when the case mix of enrollees is very different.

HCFA's current requirements

HCFA's requirements for performance measurement and reporting vary by program (see Table 5-S). The S/HMOs are treated like Medicare+Choice plans;

they must report HEDIS, HOS, and satisfaction measures, and they are presented on Medicare Compare.

Both PACE and EverCare must report HOS data. HCFA likely will use these data to study the feasibility of developing a health outcome measure and a special risk-adjustment method for frail Medicare beneficiaries, although researchers have technical concerns about using HOS and other self-reported information on health status from frail populations. One concern is whether reports of health status from enrollees who are cognitively impaired are as reliable as reports from the populations for which the data collection instrument was developed. Another concern is whether proxies can help fill out survey information on behalf of beneficiaries unable to do so.

PACE plans are not required to report HEDIS or consumer satisfaction measures. On a separate track that predates PACE as a permanent program, HCFA is developing an outcome-based,

**TABLE
5-8**

Reporting requirements for Medicare+Choice and programs for frail beneficiaries, 1999

Requirement	Medicare+Choice	PACE	S/HMO	EverCare
HEDIS and HEDIS audit	✓		✓	Must provide data, but not audited
Health outcomes survey	✓	✓	✓	✓
Consumer satisfaction survey	✓		✓	
OASIS for home health users (home health agency responsibility)	✓	✓	✓	NA
Minimum data set for nursing home users (nursing home responsibility)	✓	✓	✓	✓
Adjusted community rate proposal	✓		modified for two S/HMOs	✓
Hospital encounter data for risk adjustment	✓	✓	✓	✓
Physician incentive arrangements	✓		✓	✓

Note: PACE (Program of All-Inclusive Care for the Elderly), S/HMO (Social Health Maintenance Organization), HEDIS (Health Plan Employer Data and Information Set), OASIS [Outcome and Assessment Information Set]. NA [not available].

continuous quality improvement program for PACE. One component of this research is developing outcome measures that cover:

- changes in health and functional status,
- physiology,
- emotion or behavior,
- use of services,
- sentinel events,
- satisfaction with the program, and
- social services provided by PACE (HCFA 1996b).

HCFA's contractor recently convened a series of clinical panels to review an extensive list of possible measures. The next steps will be to specify the data items needed to calculate the measures and test their feasibility (Center for Health Services and Policy Research 1998).

In addition to HOS data, EverCare plans must report unaudited HEDIS measures, but the plans are not required to survey their enrollees' satisfaction using the standard satisfaction instrument and process. Because EverCare is a relatively new program, the evaluation has not yet been completed. That evaluation will look at a wide variety of performance measures to:

- compare enrollees to nonenrollees,
- describe EverCare implementation and operation,
- measure changes in care processes and quality,
- gauge the effect of the program on providers,
- measure the effect of the program on enrollees' health and health care use,
- assess the satisfaction of enrollees and their families, and

- identify the effect of the program on costs and payers for care (Kane 1998).

Specific outcome measures for EverCare will include beneficiary morbidity and mortality, avoidable deaths, preventable hospitalizations, preventable illnesses, emergency room visits, and nursing home complications. The evaluation also will look at delays in the use of services and access to services, including the amount and timing of primary care. These measures will be drawn from a variety of sources, including the minimum data set (standardized information held by the nursing home), surveys, chart review, and EverCare and Medicare data (Kane 1998).

Patterns of care and diagnoses for frail populations

Examining patterns of care and diagnoses for frail populations is a useful first step toward considering performance measures for plans that specialize in caring for these populations. The overall pattern of spending for care likely will identify the types of services that frail beneficiaries use most and potential opportunities for more cost-effective care management. The diagnoses assigned during care may provide a first glimpse at how the health care problems of these populations might differ from each other and from Medicare beneficiaries generally.

MedPAC compared the profiles of Medicare service use for two groups of Medicare beneficiaries to the profile for average beneficiaries in the traditional program in 1995. The first group, community residents with serious functional limitations, probably resembles the population that would be eligible to enroll in PACE and considered eligible for community long-term care benefits in S/HMOs. These beneficiaries are age 55 or older, and all have significant functional disabilities.⁵ The second group, residents of nursing homes, is a relevant population for considering performance measures for EverCare.

Medicare program spending Frail community residents had much higher Medicare spending than that for the average beneficiary, with average total payments of \$13,300, more than triple the amount for the average beneficiary in the traditional program (see Table 5-9). Although payments for each type of Medicare service were higher for frail community residents, the largest differences were in inpatient hospital and home health care use. Nursing home residents' total Medicare payments were more than double the payments for average beneficiaries. Nursing home residents' spending for inpatient hospital and skilled nursing facility care also was much higher than the average.

Use of Medicare services In general, frail Medicare beneficiaries who live in the community and in nursing homes are much more likely than the average beneficiary in the traditional Medicare program to use services, particularly post-acute care; and frail beneficiaries who use services also tend to use more of them than the average beneficiary in traditional Medicare who uses services. Greater use of post-acute services suggests that the post-acute care sector may be a good place to focus work to develop quality measures.

Frail beneficiaries in the community were more likely than the average beneficiary in traditional Medicare to use all Medicare services (see Table 5-10). For example, approximately 53 percent of frail beneficiaries in the community used durable medical equipment, compared with only 18 percent of beneficiaries in the traditional Medicare program. Half of the frail beneficiaries in the community used home health care, compared to 10 percent of the beneficiaries in the traditional program. For most services, Medicare spending also was higher when a frail community resident used a given service than when an average beneficiary in the traditional program used the same service.

5 They require either hands-on assistance with three out of five ADLs or hands-on assistance with one ADL and four out of five instrumental ADLs. This definition is similar to the one used in Gruenberg 1999.

TABLE 5-9

Distribution of spending by beneficiary frailty and residence, 1995

Average Medicare payment per group member

Type of service	Beneficiaries in traditional Medicare	Share of total Medicare spending	Frail beneficiaries in community	Share of total Medicare spending	Frail beneficiaries in nursing homes	Share of total Medicare spending
PPS hospital	\$1,720	41%	\$5,035	38%	\$3,324	37%
Physician	1,092	26	1,879	14	1,793	20
Home health agency	472	11	3,658	27	380	4
Outpatient hospital	377	9	572	4	1,152	13
Skilled nursing facility	201	5	818	6	1,375	15
Durable medical equipment	137	3	471	4	464	5
Rehabilitation facility	110	3	51.5	4	47	1
Other hospital facility	87	2	236		403	4
Hospice	19	0	162		163	2
Totals	\$4,215		\$13,346		\$9,101	

Note: Analysis is for Medicare beneficiaries in traditional Medicare, with both Part A and Part B coverage, eligible because of age or disability. Frail beneficiaries in community are age 55 or older and require hands-on assistance with three out of five ADLs or one ADL and four out of five IADLs. PPS [Prospective Payment System]. Percentages may not sum because of rounding.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Cost and Use File, 1995.

Nursing home residents were less likely than the average Medicare beneficiary in the traditional program to use home health or rehabilitation facility services, but they were more likely to use most other Medicare services. Compared with both average Medicare beneficiaries and frail community residents, beneficiaries living in nursing homes were more likely to use skilled nursing facility care and had longer lengths of stay.⁶ This situation probably reflects both care just before becoming a permanent nursing home resident and care following a hospital stay after a beneficiary had become a nursing home resident.

Differences in hospital diagnoses Nursing home residents tend to have different common diagnoses than frail beneficiaries living in the community and all beneficiaries in the traditional program (see Table 5-11). For beneficiaries living in nursing homes, at least five of the 10 most commonly

assigned diagnoses are not among the most common diagnoses for either frail community residents or beneficiaries in traditional Medicare. Diagnoses such as respiratory infections, kidney and urinary tract infections, nutritional and metabolic disorders, and gastrointestinal hemorrhage among nursing home residents suggest the need for quality measures that reflect the different health care problems of this population.

RECOMMENDATION 5 E

Performance measures for programs for frail Medicare beneficiaries should reflect the beneficiaries' health care needs and special practices for their care.

Ideally, innovations and best practices will come from specialized programs and from Medicare+Choice plans. As Medicare has used demonstrations to test new ideas for wider adoption, performance measures developed for

these programs also should be tested and used in the mainstream Medicare programs. These performance measures then will provide an indication of how well all plans meet the needs of frail enrollees. The decision about which particular measures to apply in Medicare+Choice should be driven by the percentage of enrollees who might find the measures relevant, the improvement an adjuster might make, and the cost of implementation.

RECOMMENDATION 5 F

The Secretary should include special measures for evaluating and monitoring care for frail Medicare beneficiaries in the Medicare+Choice plan quality measurement and reporting requirements.

Data collection burden

As HCFA moves forward on performance measurement for these programs, it will

⁶ Length of stay includes days paid for by Medicare as well as noncovered days.

**TABLE
5-10**

Distribution of Medicare service use, 1995

Type of service	Beneficiaries in traditional Medicare	Frail beneficiaries in community	Frail beneficiaries in nursing homes
Durable medical equipment			
Beneficiaries using	18.0%	53.0%	33.1%
Payment per user	\$760	\$889	\$1,401
Home health agency			
Beneficiaries using	9.5%	50.0%	8.9%
Visits per user	81.7	123.6	65.0
Payment per user	\$4,950	\$7,314	\$4,250
Rehabilitation facility			
Beneficiaries using	0.9%	5.0%	0.5%
Length of stay per user [days]	19	17	18
Payment per user	\$12,169	\$10,220	\$10,251
PPS hospital			
Beneficiaries using	18.4%	43.1%	33.8%
length of stay per user [days]	10	14	15
Payment per user	\$9,328	\$1,671	\$9,843
Outpatient hospital			
Beneficiaries using	62.5%	72.3%	85.3%
Payment per user	\$603	\$791	\$1,350
Physician			
Beneficiaries using	92.8%	97.1%	99.5%
Visits per user	10.3	18.0	18.4
Payment per user	\$1,177	\$1,935	\$1,802
Skilled nursing facility			
Beneficiaries using	2.9%	9.6%	16.4%
length of stay per user (days)	40	32	67
Payment per user	\$6,924	\$8,504	\$8,368

Note: Analysis is for Medicare beneficiaries in traditional Medicare with both Part A and Part B coverage, eligible because of age or disability. Frail beneficiaries in community are age 55 or older and require hands-on assistance with three out of five ADLs or one ADL and four out of five IADLs PPS (Prospective Payment System).

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Cost and Use File, 1995

work together toward a defined, prioritized set of goals for improving beneficiaries' care (see Chapter 2). Data collection burdens and the lack of coordination across care settings are magnified when patients are frail, use many post-acute providers, and are enrolled in managed care programs responsible for conducting their own quality assurance activities.

Coverage of non-Medicare benefits

HCFA has required PACE and S/HMO plans under their demonstration agreements to provide non-Medicare services. Both PACE and S/HMO demonstration programs required participating plans to cover certain benefits—notably outpatient drugs, community-based long-term care benefits, and case management—not covered under the traditional Medicare program. A critical issue facing the Secretary is whether to continue requiring these plans to cover these benefits even when Medicare's capitation amounts are based on benefits in the traditional program only.

Rules under Medicare+Choice

In the Medicare+Choice program, no plan is required to cover benefits not covered by traditional Medicare, and there is no provision for higher Medicare payments if they do. Coordinated care plans (managed care plans) must provide lower cost sharing or enhanced benefit packages (of their own design) if Medicare's payments are expected to exceed plan costs for providing the Medicare benefit package. As Medicare managed care has become competitive, enhanced benefit packages have become common, but continued enhanced packages are not guaranteed if plans' costs rise faster than their revenues.

Any plan will want to provide non-Medicare benefits to either a general or targeted population to the extent that doing so proves to be more cost-effective than staying within the traditional Medicare package. If benefits are not

need to take stock of the multiple assessments that already occur. PACE plans, for example, conduct regular patient assessments as part of their care-management approach and collect centralized data as part of the demonstration agreement with HCFA. Many PACE enrollees use home health care, and those who do will be assessed as part of the

Outcome and Assessment Information Set for Medicare-certified home health agencies. PACE enrollees using nursing home care must be assessed as part of Medicare's nursing home standards.

Multiple assessments also occur in the other programs, and the Commission recommends that Medicare's quality assurance and improvement systems

**TABLE
5-11**

Most common diagnosis related groups assigned to PPS hospital stays by beneficiary frailty and residence, 1995

Beneficiary DRG ranking	DRG Code	DRG	Number of beneficiaries	Share of all DRGs for beneficiary group (as percentages)
	127	Heart failure and shock	336,749	7 %
2	089	Simple pneumonia and pleurisy with CCs	352,452	7
3	209	Major joint and limb reattachment procedures	264,257	5
4	182	Esophagitis, gastroenteritis and miscellaneous digestive disorders with CCs	224,928	5
5	014	Specific cerebrovascular disorders except TIA	209,942	4
6	138	Cardiac arrhythmia and conduction disorders with CCs	181,167	4
7	088	COPD	181,023	4
8	112	Percutaneous cardiovascular procedures	157,888	3
9	140	Angina pectoris	147,823	3
10	132	Atherosclerosis with CCs	139,563	3
		Total		45%
Frail beneficiaries, 5.5 years and older, in community				
1	127	Heart failure and shock	38,328	20%
2	089	Simple pneumonia and pleurisy with CCs	23,668	12
3	416	Septicemia	15,032	8
4	014	Specific cerebrovascular disorders except TIA	12,397	6
5	01.5	TIA and precerebral occlusions	1,1782	6
6	415	OR procedure for infectious and parasitic diseases	10,475	5
7	148	Major small and large bowel procedures with CCs	8,244	4
8	210	Hip and femur procedures with CCs	7,612	4
9	209	Major joint and limb reattachment procedures	7,611	4
10	113	Amputation for circulatory system disorders	6,964	4
		Total		73%

continued

cost-effective but are otherwise valuable to Medicare beneficiaries, they should be willing to pay for them through premiums. However, the problem with long-term care benefits is that Medicare beneficiaries tend not to recognize that these benefits are not in the standard Medicare package or to appreciate their likelihood of needing to use the benefits.

Comprehensive benefits define special programs

Because comprehensive benefit packages have in part defined PACE and S/HMO, taking out the requirement that plans offer

expanded coverage and leaving the benefit package design to the plans might lead to fewer meaningful differences between PACE, S/HMO, and Medicare+Choice plans. These additional benefits do raise an issue of fairness, however, because they are available to some beneficiaries but not others. The additional benefits may also provide an advantage to those plans that are allowed to offer them.

Case management

A related issue is the extent to which PACE and S/HMO plans must be required to operate case management programs that

meet specific criteria. Requiring plans to provide case management may be unnecessary. As with enhanced benefit packages, to the extent that case management leads to more efficient use of Medicare services, plans will have incentives to furnish targeted case-management services. To the extent that case management leads to better outcomes, measuring those outcomes regularly may provide an additional incentive for plans to furnish case management. Furthermore, a requirement to provide case management may not be fair because the Medicare capitation does not include spending for

**TABLE
5-11**

Most common diagnosis related groups assigned to PPS hospital stays, by beneficiary frailty and residence, 1995 (continued)

Beneficiary Group DRG/Ranking	DRG Code	DRG	Number of beneficiaries	Share of all DRGs for beneficiary group (as percentages)
Frail beneficiaries living in nursing homes				
1	089	Simple pneumonia and pleurisy with CCs	65,920	15%
2	127	Heart failure and shock	39,423	9
3	079	Respiratory infections and inflammations with CCs	34,455	8
4	320	Kidney and urinary tract infections with CCs	31,433	7
5	210	Hip and femur procedures with CCs	27,165	6
6	296	Nutritional and miscellaneous metabolic disorders with CCs	26,758	6
7	429	Organic disturbances and mental retardation	25,769	6
8	014	Specific cerebrovascular disorders except TIA	24,623	6
9	209	Major joint and limb reattachment procedures	24,167	5
10	174	Gastrointestinal hemorrhage with CCs	22,231	5
		Total		73%

Note: Analysis is for Medicare beneficiaries in traditional Medicare, with both Part A and Part B coverage, eligible because of age or disability. Frail beneficiaries in community are age 55 or more and require hands-on assistance with three out of five ADLs or one ADL and four out of five IADLs.
(PPS) Prospective Payment System. (CC) Complications and/or comorbidities. (COPD) Chronic obstructive pulmonary disease. (TIA) transient ischemic attack. (OR) operating room

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Cost and Use file

this service. However, case management is a key feature defining these specialized programs, and is likely to be adopted by mainstream Medicare+Choice plans if disability is included in capitation payments, and plans begin to develop protocols for caring for frail beneficiaries.

Complications for dually eligible beneficiaries

The picture is complicated when specialized programs cover benefits also covered by Medicaid. PACE plans provide all Medicaid-covered services and receive capitation payments for them (either from Medicaid programs for Medicaid-eligible enrollees or as private premiums from those without Medicaid). S/HMO plans cover some benefits that Medicaid would cover (long-term nursing home care is a major exception), but relatively few S/HMO enrollees qualify for Medicaid. If Medicare required PACE and S/HMO

plans to cover community-based long-term care and outpatient drugs but did not provide additional payments for those benefits, plans would need to choose between charging beneficiaries premiums for this coverage or funding the coverage out of savings from efficiencies. If plans decided to charge a premium, a Medicaid program would pay it for dually eligible enrollees, but only to the extent that the premium represented the cost of Medicaid-covered benefits.⁷ Alternatively, if Medicare decided to pay PACE and S/HMO plans more to help cover non-Medicare benefits, Medicaid programs no longer would need to pay for these benefits for enrollees joining the plans.

Eligibility criteria

PACE, S/HMO, and EverCare all use state definitions of nursing home eligibility to define which beneficiaries may enroll in the programs (PACE and

EverCare) and which beneficiaries have access to enhanced benefits (S/HMO). State Medicaid programs use these definitions to determine whether enrollees need nursing home care.⁸ Nursing home eligibility criteria vary by state and can have a significant impact on the percentage of Medicare beneficiaries who qualify. A recent study found, for example, that among nine states, the percentage of Medicare beneficiaries eligible for nursing home placement varied from 8.4 percent to 20.7 percent of the population (Center for Health Systems Research and Analysis 1998).

Varying criteria across states may not be a problem when programs for frail Medicare beneficiaries are small or demonstrations. In the short term, having Medicare follow Medicaid policies is simpler than developing a uniform national standard. And for PACE, which

7 For example, Medicaid programs generally provide community long-term care services and case management at their option and under waiver authority to targeted populations.

8 The criteria do not include the financial assessments for general Medicaid eligibility.

serves a high share of dually eligible enrollees, plans can apply a uniform standard for assessing Medicare and Medicaid eligibility for PACE benefits. But as PACE and S/HMO become permanent options and are available more broadly, it may be appropriate for Medicare to define national eligibility criteria. Although PACE remains a relatively small program, drawing many fewer enrollees than are eligible, this is probably a long-term issue to monitor.

Enrollment and disenrollment rules

To establish the rules under which PACE (as a permanent program) and S/HMO (as a Medicare+Choice option) will operate, the Secretary should consider whether to limit enrollment and disenrollment to mirror the Medicare+Choice program. Starting in 2002, enrollment in Medicare+Choice will be primarily annual. Medicare beneficiaries generally will choose between the traditional program and Medicare+Choice plans and among different Medicare+Choice plans in November, with their enrollment effective January 1 of the following year. One switch will be permitted early in the year, after which beneficiaries will be able to change their enrollment only for cause or during the next open enrollment period in November.

Under the PACE, S/HMO, and EverCare demonstrations, beneficiaries have been allowed to enroll in and disenroll from programs for frail Medicare beneficiaries on a monthly basis.⁹ Under the permanent PACE program for Medicare, the Congress mandated that PACE enrollees be permitted to disenroll from plans without cause in any month.

The Secretary probably will not wish to limit beneficiary opportunities to enroll in PACE to once per year. First, the Congress required the program to allow voluntary disenrollment at any time, so continuous PACE enrollment would be parallel. Second beneficiaries with health or social

support crises who consider PACE an alternative to nursing home care probably will not be able to wait for an annual enrollment period. Third, mortality for the PACE population is relatively high, so program census could drop significantly over the year because of mortality alone (see Table 5-4). Because PACE uses a relatively large proportion of dedicated, salaried staff, declines in census not made up for by new enrollees would place great financial stress on PACE plans.

RECOMMENDATION 5G

The Secretary should not now limit enrollment into the Program of All-Inclusive Care for the Elderly to a particular time of the year.

The Secretary's decisions about enrollment and disenrollment policies for S/HMOs will hinge on whether the S/HMO program is extended as a demonstration or folded into the Medicare+Choice program.

The question of comparable standards on this issue for EverCare can be deferred because EverCare's demonstration period is set to end before the limits on Medicare+Choice enrollment and disenrollment will go into effect. However, as with PACE enrollees, EverCare enrollees have a very high mortality rate, and patient census in the program would decline significantly over a year if EverCare plans were not permitted to hold monthly open enrollment.

Plan participation criteria: nonprofit requirement for the Program of All-Inclusive Care for the Elderly

The BBA made PACE a permanent program for Medicare in 1997. Under the law, the Congress placed a cap on the number of new PACE plans permitted to enter the program each year—starting with 20 in the first year and cumulating by 20 each subsequent year. Plans may not overlap service areas, so no competition among PACE plans is possible. Seven new

plans signed agreements with Medicare and Medicaid in 1998, a much lower number than permitted. This may have happened because HCFA has been slow to issue regulations for PACE, so potential entrants are uncertain of HCFA's requirements. PACE also has been slow to start up because it is relatively capital intensive: an adult day health center must be built as the cornerstone of the program.

By statute, only nonprofit charitable institutions are allowed to participate as PACE plans. This requirement came in response to concerns from PACE plans that for-profit plans might provide fewer services because of pressure to pay stockholders and taxes. MedPAC is required to comment on whether it is appropriate to have for-profit entities in PACE. At the same time the BBA made PACE a permanent program, it required the Secretary to implement a demonstration of for-profit providers wishing to participate in PACE. This demonstration will not start until the PACE regulations take effect, and it will be at least several years before an evaluation of this demonstration is complete.,

The Commission is predisposed toward basing participation on standards and performance, not tax status, to qualify entities as PACE plans. The requirement that PACE plans must be nonprofit organizations is inconsistent with Medicare's other program participation standards. Other standards, such as performance measures and program oversight provisions, are likely to be better tools for gauging plan performance than a blanket exclusion of for-profit entities from a program.

RECOMMENDATION 5H

The Commission will await results from the Secretary's demonstration of for-profit entities in the Program of All-Inclusive Care for the Elderly before making a recommendation on allowing them to participate.

⁹ Kaiser Permanent & S/HMO limits new enrollment to one month per year.

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CHAPTER

6

Access to home health services

R E C O M M E N D A T I O N S

- 6A** The Secretary should speed the development of regulations that outline home health care coverage and eligibility criteria based on clinical characteristics of beneficiaries. The Secretary should report to the Congress recommending the legislation needed to accomplish the implementation of these regulations.
-
- 6B** The Secretary should use criteria based on clinical characteristics of beneficiaries to monitor use of home health services.
-
- 6C** If the Congress is not confident that the Secretary can implement a prospective payment system for home health services by 2000, then it should explore the feasibility of establishing a process for agencies to exclude a small share of their patients from the aggregate per-beneficiary limits. Such a policy should be implemented in a budget-neutral manner.
-
- 6D** The Secretary should establish a nationally uniform process to ensure that fiscal intermediaries have the training and ability to provide timely and accurate coverage and payment information to home health agencies.
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- 6E** The Secretary should improve the applicability of the Medicare fee-for-service appeals process for home health users and establish a mechanism for informing beneficiaries about their rights to appeal determinations of noncoverage by home health agencies.

Access to home health services

In response to a decade of rapidly rising spending for Medicare home health services, the Balanced Budget Act of 1997 modified home health care payments. The Congress intended the interim payment system to be a temporary mechanism to control home health spending until a prospective payment system was developed. Beneficiary advocates and home health industry representatives contend that these Medicare payment limits restrict beneficiaries access to home health care. In response, the Congress directed the Medicare Payment Advisory Commission to examine the impact of the interim payment system on access to home health services. Preliminary data suggest that fewer Medicare beneficiaries are receiving home health care than in the recent past, the number of visits per user has decreased, and the number of agencies has declined. Some agencies report that they no longer accept or are likely to discharge earlier certain types of patients because of the payment changes. Beneficiary representatives indicate that some beneficiaries are having more difficulty obtaining services to which they believe they are entitled under Medicare's benefit. However, the degree to which this can be attributed to the payment system cannot be ascertained because concurrent policy changes and other factors in the home health market also have contributed to the changes. Moreover, a lack of clinically based standards for home health use makes it impossible to assess the degree to which these changes are appropriate.

In this chapter

- Home health payment policy
- Monitoring access to home health services

The Balanced Budget Act of 1997 (BBA) required the Health Care Financing Administration (HCFA) to carry out new payment policies aimed at controlling Medicare spending for home health services, then one of the fastest growing parts of the Medicare program. The BBA modified Medicare's payment policies by requiring that the existing cost-based system be replaced with a prospective payment system (PPS) beginning in October 1999.¹ To slow spending until the prospective payment system is in place, the BBA also modified the payment limits for home health services. This interim payment system (IPS) became effective for cost-reporting periods beginning October 1, 1997.

In response to concerns that the IPS was reducing agencies' ability to provide care to Medicare beneficiaries, the Congress modestly increased the payment limits beginning October 1998. It also directed the Medicare Payment Advisory Commission (MedPAC) to examine the impact of the interim payment system on access to care. In this chapter, the Commission describes the IPS and factors that may affect access to care, including the number of providers and responses of home health agencies' to the interim payment system. We also describe some of the access barriers reported by individuals familiar with beneficiaries using home health services. The Commission makes recommendations throughout the chapter on ways to ameliorate concerns raised.

Home health payment policy

Medicare payments for home health services rose to about \$17 billion in 1996 from about \$2 billion in 1988, an average annual increase of 3.1 percent (MedPAC 1998). This resulted from both an increase in the number of beneficiaries who received home health services and an increase in the number of visits they received. During this

period, the number of home health users doubled; by 1996, one in ten beneficiaries used Medicare home health care. For those who received services, annual visits increased from 23 to 79 between 1988 and 1996 (see Table 6-1). While payments per visit remained relatively stable during this period—increasing less than 2 percent annually—payments per user increased about 18 percent annually.

To some extent, Medicare's previous payment system fostered growth in spending because the program paid home health agencies their costs, up to a limit. These payment limits, applied in aggregate, encouraged home health agencies to boost their revenues by

providing more services and keeping their average costs per visit below the national limits.

The Congress mandated the IPS to reduce overall home health spending by controlling both spending per user and spending per visit. The IPS controls spending per user through an aggregate limit on agency spending. This limit, termed the aggregate per-beneficiary limit, is based on a blend of historical per-user costs for the agency and agencies in the region. Reducing the per-visit limits, which limited home health agency payments previously, continues to control spending per visit. (See text box on this page for a detailed explanation of how the IPS limits are calculated.)

Calculating the interim payment system limits

Before the BBA, Medicare paid home health agencies their actual costs up to an aggregate limit based on their per-visit costs. An agency's aggregate limit was calculated by multiplying the national per-visit limit for each of the six types of visits by the number of visits of each type the agency furnished. The national limit was set at 112 percent of the mean cost for each type of visit.

For example, assume an agency treated two Medicare beneficiaries during a cost-reporting period.

Further assume that the agency provided one skilled nursing visit and one physical therapy visit to Beneficiary A and ten skilled nursing visits and five physical therapy visits to Beneficiary B. Finally, assume the applicable per-visit limits for skilled nursing visits and physical therapy visits are \$100 and \$150, respectively. The first table below shows the aggregate per-visit cost limit for the agency would be \$2,000. Thus, the agency would receive the lower of its actual costs or \$2,000.

Continued on page 109

TABLE 6-A

Calculating aggregate per-visit limits

Beneficiary	Number of visits		Per-visit limit	Contribution to aggregate per-visit limit
	Skilled nursing	physical therapy		
A	1		\$100	\$100
A		1	150	150
B	10		100	1,000
B		5	150	750
Aggregate per-visit cost limit				\$2,000

Note: Payments are the lower of actual costs, the aggregate per-beneficiary limit, or the aggregate per-visit limit

¹ The Omnibus Consolidated and Emergency Supplemental Appropriations Act (P.L. 105-277) delayed the implementation of the prospective payment system until October 1, 2000.

Calculating the interim payment system limits

Continued from page 108

The BBA changed Medicare's home health payment method in two ways. First, it added an average per-beneficiary cost limit. This new limit was based on 98 percent of the average per-beneficiary patient costs for each agency in fiscal year 1994 (adjusted for price inflation for 1996-1998) and the average per-patient cost for agencies in the region. Seventy-five percent of an agency's historical costs are blended with 25 percent of the median costs of agencies in the same region. The average per-beneficiary limit for agencies that became Medicare certified after fiscal year 1994 was set at the national median of the limits for established agencies.

Second, the BBA decreased the per-visit cost limits from 112 percent of the national mean cost per visit to 105 percent of the national median. Because the medians were less than the means, this reduction was greater than 7 percent. For cost-reporting periods starting in fiscal year 1998, Medicare pays home health agencies the lower of their actual costs, the aggregate per-beneficiary limit, or the aggregate per-visit limit.

Using the same simplified example and adding the assumptions that per-visit limits were 10 percent lower and the agency's per-beneficiary cap is \$850, Table 6-B shows the effect of the BBA policy. The aggregate per-visit limit for the agency would be \$1,800. The aggregate per-beneficiary limit is the number of beneficiaries multiplied by \$850—or in the case of this agency treating two beneficiaries, \$1,700. Thus, the agency would receive the lower of its actual costs or \$1,700.

In October 1998, the Congress made minor adjustments to the IPS for fiscal year 1999. It increased the per-visit limits to 106 percent of median costs per visit. The legislation also increased the per-beneficiary limits for established agencies that were under the national average by one-third of the difference between their limit under the original BBA formula and the national average. Per-beneficiary limits for agencies established between 1994 and 1998 will be based on 100 percent of the national rate instead of 98 percent. To discourage entry of new agencies into the market, agencies established in fiscal year 1999 or later will have their per-beneficiary limits set at 75 percent of the national median for established agencies, based on 98 percent of the national rate. ■

**TABLE
6-B**

Calculating aggregate per-visit limits
(assuming a 10 percent reduction)

Beneficiary	Number of visits		Per-visit limit	Contribution to aggregate per-visit limit
	Skilled nursing	Physical therapy		
A	1		\$90	\$90
A		1	135	135
B	10		90	900
B		5	135	<u>675</u>
Aggregate per-visit cost limit				\$1,800

Note: Payments are the lower of actual costs, the aggregate per-beneficiary limit, or aggregate per-visit limit.

The per-beneficiary limits quickly became the most controversial element of the IPS. Because these limits are based on historical practice and expense patterns, many agencies may exceed their limits unless they reduce average costs. Last year, HCFA estimated that about 65 percent of freestanding home health agencies and about 40 percent of hospital-based agencies would exceed their aggregate per-beneficiary limits in 1998. HCFA also expected that these agencies' costs would exceed their limits on average by 11 percent and 6 percent, respectively (HCFA 1998). Some agencies may have kept their average costs below their limits by reducing the number of visits or by accepting new patients who need less expensive care. Some agencies whose case mix became more costly, however, may have difficulty reducing their costs sufficiently without eliminating appropriate services covered under the Medicare benefit.

Monitoring access to home health services

To analyze access to services, the Commission examined Medicare home health claims data, surveyed home health agencies, and convened a panel discussion with individuals familiar with beneficiaries' access problems. (Details of our study design are found in the box on the next page.)

We believe the home health environment has changed considerably in the past two years. For example, the number of home health agencies has decreased substantially compared with the number in the period immediately before the IPS. Some home health agencies said they avoid patients whose care they expect or find to be expensive. Some agencies also said they provide fewer services per user than in the past. Participants in our panel said that some beneficiaries have been unable to receive the services to which they believe they are entitled under Medicare. Panelists also indicated that once patients are identified as having

Access to home health services: study design

The following sections describe MedPAC's survey of Medicare home health agencies and the panel of individuals knowledgeable about beneficiaries' access concerns.

Survey of Medicare-certified home health agencies

To learn about the impact of the IPS payment limits on the behavior of home health agencies, MedPAC contracted with Abt Associates Inc., a social science research firm based in Cambridge, MA, to survey by telephone about 1,000 home health agencies. The goal of the survey was to gather information about agencies' understanding of the IPS and whether the payment policies influenced how they provided home health services to Medicare beneficiaries.

Using a September 1998 extract of HCFA's Online Survey, Certification, and Reporting System (OSCAR), augmented by information about closures identified through January 1999, Abt selected a random sample of Medicare-certified home health agencies, stratified by census region and home health agency size. The number of Medicare patients served during 1997 defined agency size, and agencies that served a larger number of patients were slightly more likely to be chosen for the sample.

About a week before the telephone survey, MedPAC sent letters to home health agency administrators to explain the purpose of the survey and to encourage participation. To facilitate completion of the survey, MedPAC asked administrators to identify the individuals most knowledgeable about Medicare policies and tell them to expect a call.

To improve the reliability of the survey instrument, Abt trained interviewers and field-tested the instrument before implementing it.

Abt also sought to increase the survey response rate. Interviewers used phone numbers listed in the OSCAR to contact agencies in the sample, but if the OSCAR phone number had been disconnected, they consulted other sources. They also left messages on answering machines indicating that someone would call back. If the agency employee who was most knowledgeable about Medicare was unable to participate in the interview at the time of the initial call but agreed to participate in the survey, Abt scheduled an appointment at a time convenient for the employee.

Abt conducted the survey between February 23 and March 24, 1999. The response rate was approximately 80 percent, with 1,054 completed interviews.

Panel of individuals knowledgeable about beneficiaries' access concerns

To learn about beneficiary perspectives on access to home health services, MedPAC contracted with Abt Associates Inc. to convene a panel of individuals familiar with beneficiaries' access problems. The purpose of the panel was to learn more about the nature of home health access problems, not the extent to which they exist. Abt asked the panel to address the following questions:

- How have changes in Medicare payment policy affected beneficiary access to home health care?
- What happens to beneficiaries who have difficulty accessing home health services?

MedPAC intended panelists to have direct experience with Medicare beneficiaries having difficulty obtaining home health care. The panel was recruited using a "snowball"

sampling technique. First, Abt compiled a list of about 10 individuals and organizations considered to be informed about the IPS and Medicare beneficiaries' concerns. Next, Abt contacted these individuals and organizations to discuss their insights into the effects of the IPS on access to home care and to obtain names and contact information for other individuals and organizations knowledgeable on the issue. MedPAC concentrated on identifying individuals and organizations in areas where home health agencies reportedly had closed. But because of the extensive geographic variation in home health use, MedPAC also sought a national representation for the panel membership. In total, Abt contacted about 80 individuals as potential panelists.

From these potential participants, MedPAC selected 14 panel members. The goal was to obtain representation of a range of professionals from different geographic areas who are in contact with different types of Medicare beneficiaries who might use home health care (for example, those with specific diseases, frail elders, individuals with disabilities, minorities, and low-income beneficiaries).

The panel included three physicians (two geriatricians), one nurse, and one social worker. It also included four attorneys, two health and aging advocates, and one state government official who worked for a Medicaid home and community-based services program. The panelists represented seven of the nine census divisions and came from the District of Columbia and 12 states—Arkansas, California, Connecticut, Georgia, Indiana, Maryland, Massachusetts, Michigan, New York, Tennessee, Texas, and Virginia. Five of the panelists indicated they have direct experience and concern about home health care in rural areas. ■

**TABLE
6-1**

Medicare home health use, 1988-1996

Year	Number of beneficiaries receiving home health services (in thousands)	Number of visits (in thousands)	Visits per user	Payments per user
1988	1,582	37,130	23	1,287
1989	1,685	46,297	27	1,500
1990	1,940	69,389	36	1,986
1991	2,226	98,650	44	2,487
1992	2,523	132,494	53	3,061
1993	2,868	168,029	59	3,556
1994	3,175	220,495	69	4,179
1995	3,457	266,261	77	4,621
1996	3,583	283,939	79	4,819

Source: Health Care Financing Administration, Office of the Actuary, April 1999.

expensive care needs, agencies may discontinue their care abruptly and these patients may have difficulty obtaining care from other agencies. In effect, some home health agencies are making coverage decisions based on payment considerations.

Although these findings are suggestive, concurrent changes in the home health environment prevent us from drawing conclusions about the direct effect of the IPS on access to care. Other factors that may explain decreases in use include antifraud initiatives targeting home health care, the removal of venipuncture as a qualifying service for home health eligibility, more stringent Medicare claims review and sequential billing policies, and market forces affecting the supply of home health agency employees. Agencies also may be modifying their behavior, anticipating a prospective payment system.

Moreover, it is impossible to determine the degree to which the changes in use of home health services that have occurred in the past two years are appropriate. It is

difficult in part because Medicare's standards for eligibility and coverage are too loosely defined.

RECOMMENDATION 6A

The Secretary should speed the development of regulations that outline home health care coverage and eligibility criteria based on clinical characteristics of beneficiaries. The Secretary should report to the Congress recommending the legislation needed to accomplish the implementation of these regulations.

Medicare's current eligibility and coverage policies do not consider clinical characteristics of home health users. Current policy defines eligibility vaguely, and beneficiaries may be eligible for home care if they are homebound and need skilled services. Beneficiaries are considered homebound if they are normally unable to leave home, if leaving home requires a considerable and taxing effort, and if absences from the home are infrequent and relatively short. However, fiscal intermediaries apply considerable discretion in interpreting and applying the homebound definition (GAO 1996). As the BBA requires, the Secretary recently

issued a report on the homebound requirement and its application. While the Secretary did not recommend adopting a new definition, improving homebound determinations may be possible in the future, using patient-level data from the Outcomes and Assessment Information Set (OASIS).

Medicare's coverage standards allow for providing services part time or intermittently. Beneficiaries may receive services any number of days per week but for fewer than 8 hours each day and for 28 or fewer hours each week (or, subject to case-by-case review, for fewer than 8 hours each day and for 35 or fewer hours per week).

These guidelines, however, do not suggest appropriate levels of care. As the BBA requires, the Secretary is in the early stages of developing coverage standards for home health care use based on patient characteristics and need. The Commission believes that separate standards should be developed for patients with chronic care and those with acute care needs. Because the Secretary faced lawsuits regarding home health coverage and eligibility rules in the past, she should report to the Congress any legislative changes that would be helpful in implementing the new coverage standards.

RECOMMENDATION 6B

The Secretary should use criteria based on clinical characteristics of beneficiaries to monitor use of home health services.

Once HCFA establishes clinically based coverage standards for use of home health services, the agency also should use these standards to monitor access to home health care and appropriate use of services. HCFA could monitor these aspects of use through contracts with Medicare's quality improvement organizations as it is doing to monitor access and quality in skilled nursing facilities.*

2 The organizations now prefer to be called quality improvement organizations because they believe this title denotes the scope and orientation of their current responsibilities better than does peer review organizations, the term used in statute and by HCFA.

Ensuring beneficiaries have access to appropriate services

Provider supply is one of many aspects of measuring access to care. While a certain number of providers is necessary to furnish care, it is difficult to determine the appropriate number--enough so that care is available but not so many that care is furnished inefficiently. Moreover, supply relates to both the number of agencies and their capacity to provide care. Examination of certification data offers information on the number of agencies, and our survey of agencies furnished some insight into changes in agency capacity.

During most of the 1990s, the number of Medicare-certified home health agencies grew about 9 percent annually. Analysis of agency counts by MedPAC and by the General Accounting Office (GAO 1998) as well as findings from the Commission's survey of agencies suggest a consistent trend--a roughly 10 percent decline in the number of agencies in the year following implementation of the IPS, and even another 5 percent to 10 percent decline so far in fiscal year 1999.

Several factors in addition to the IPS are likely associated with declines in agency supply. For example, greater oversight of home health providers may have slowed agencies' entry into the market in the past two years. The Secretary imposed a four-month moratorium on the certification of new home health agencies in early 1998. Several months after she lifted this moratorium, the Omnibus Consolidated and Emergency Supplemental Appropriations Act (P.L. 105-277) required that new home health agencies (those certified on or after October 1, 1998), have per-beneficiary limits equal to 75 percent of the median for existing agencies. This new limit was intended to discourage the entry of agencies into the Medicare program.

Regardless of the causes, it is too early to assess the appropriateness of declines in agency supply. The Commission views some decline as an appropriate response to the rapid increase in home health agencies and service use during the 1990s.

MedPAC also examined whether changes in Medicare payment limits induced agencies to change how they deliver care to beneficiaries. The Commission expected that agencies would reduce their costs in response to the IPS in several ways. Because spending growth results in part from increases in the number of visits per user, we expected agencies to reduce the number of visits per person served. Agencies might attempt to lower average costs per person by eliminating discretionary visits, by substituting less costly visits for expensive care, or by providing a few specialized visits rather than a larger number of unspecialized visits. Because per-beneficiary limits are based on average costs, home health agencies need not reduce their costs for all patients uniformly. By averaging costs, the payment limits allow inexpensive patients to balance out the more expensive ones. With this in mind, home health agencies might attempt to attract more inexpensive patients or avoid patients with expensive needs.

Findings from an analysis of Medicare claims data suggest that home health agencies indeed have changed their practice patterns since the IPS was implemented. Claims data reveal that fewer Medicare beneficiaries received home health care in the first three months of calendar year 1998, compared with the number in the same quarter of the previous year.³ Once admitted to home care, beneficiaries use fewer services. In particular, the number of more discretionary visits, such as those by home health aides, declined. We cannot determine the magnitude of

this change, but discussions with Medicare's fiscal intermediaries confirm that the number of users and the number of visits per user have declined. Because current data limitations make it difficult to determine the extent to which home health use has changed, the Commission will reexamine the use of home health services when better data are available.

Results from MedPAC's survey of home health agencies also follow this general trend (Table 6-2). The home health agencies that we surveyed report their Medicare caseload has decreased. They also provide fewer visits per user, fewer aide visits, and they have adopted more stringent admission and discharge practices because of the IPS. Because agencies worry about operating under the per-beneficiary limits, they report avoiding high-cost or seemingly high-cost patients. Nearly 40 percent of agencies surveyed responded that because of the IPS, they no longer admit all Medicare patients whom they would have admitted previously, and about 30 percent of agencies reported discharging certain Medicare patients because of the IPS. A recent study concerning costs of home health care found that patients using care for a long time were more costly than others (Gage 1999). Indeed, agencies most frequently identified long-term or chronic care patients as those they no longer admitted or have discharged as a result of the IPS.

RECOMMENDATION 6C

If the Congress is not confident that the Secretary can implement a prospective payment system for home health services by 2000, then it should explore the feasibility of establishing a process for agencies to exclude a small share of their patients from the aggregate per-beneficiary limits. Such a policy should be implemented in a budget-neutral manner.

³ While we are confident that the data characterize general trends in home health use, we are reluctant to publish specific results because HCFA is concerned that the data may be flawed. The agency maintains that problems in the way it administered the BBA-required shift of some home health services to Medicare Part B may have resulted in underreported use during the period studied. HCFA is verifying its home health data and correcting them as needed.

**TABLE
6-2**

Medicare caseload, patient visits, admissions, and discharges of home health agencies

Survey question	Percent
Since your agency became subject to IPS, has the number of Medicare home health patients you serve..	
Increased	16%
Decreased	56
Remained the same	28
Since the Medicare interim payment system was implemented, has the total number of visits per patient that your agency provides to Medicare beneficiaries..	
Increased	2
Decreased	71
Remained the some	27
Are there patients whom you would previously have admitted for Medicare home health services who you no longer admit due to IPS?	
Yes	39
No	61
Have you discharged any Medicare patients due to IPS?	
Yes	31
No	69

Source: MedPAC survey of Medicare-certified home health agencies, conducted by Abt Associates Inc. February-March 1999.

RECOMMENDATION 6D

The Secretary should establish a nationally uniform process to ensure that fiscal intermediaries have the training and ability to provide timely and accurate coverage and payment information to home health agencies.

In the months prior to implementing the IPS, HCFA published a detailed description of the system in a program memorandum and in proposed and final rules implementing the new policy. The BBA allowed fiscal intermediaries several months to calculate and notify home health agencies of their payment limits under the IPS, though some fiscal intermediaries were late to comply with this requirement. By the time many agencies learned their individual limits, they were well into their fiscal year 1998 cost-reporting periods. As a result, they had to anticipate their limits for a portion of the year and, upon notification, adjust their practice patterns accordingly. This late notification caused confusion among agencies.

Anecdotal evidence also suggests that information provided by fiscal intermediaries and HCFA regional offices was confusing and inconsistent at times. Some agencies and physicians reported they received misleading information concerning Medicare eligibility, coverage, and payment for home health services. Because confusion about the payment system will also be a concern as HCFA implements a PPS for home health services, the Commission urges the Secretary to minimize misunderstanding so that agencies' responses do not threaten access to care.

Such an effort might include special notices to home health providers similar to the memorandum the HCFA Administrator sent to agencies to explain the IPS payment limits and agencies' responsibilities as Medicare providers. Under Medicare's conditions of participation, home health agencies must not discriminate against Medicare patients-if agencies provide care to non-

The case-mix adjusted PPS being developed will not take effect before October 2000. In the meantime, an exclusion policy for very expensive patients could be implemented. The Commission suggests allowing agencies to exclude a small portion of their patients from the aggregate per-beneficiary payment limits to ensure that these beneficiaries will have access to needed services. Medicare would reimburse care for excluded patients based on the lesser of actual costs or the aggregate per-visit limits. Because the excluded patients would receive a disproportionate amount of services, HCFA may want to have medical reviewers focus their efforts on these high-use cases.

Providing timely information to agencies and beneficiaries

Agencies might inadvertently restrict services because of misunderstandings about antifraud initiatives, coverage rules, and the mechanics of the IPS. In particular, discussions with home health agency representatives revealed they did not always know their per-beneficiary limits or understand that the limits apply to average costs for all patients served. Some agencies had interpreted the limits as absolute caps on the amount they could spend on each beneficiary. This misunderstanding may have led some providers to unnecessarily reduce the services they furnish or to avoid certain patients.

Medicare patients with health problems of a certain level of severity, they also must serve Medicare patients with the same severity of health problems. (DeParle 1998).

Pressures brought on by the IPS also have highlighted the importance of the Medicare appeals process and beneficiaries' understanding of it.

In Medicare's traditional program, beneficiaries may initiate an appeal for payment for home health services only after the agency submits a bill on their behalf and Medicare's fiscal intermediary rejects it. When agencies bar beneficiaries from admission, they cannot appeal the decision.

Even when beneficiaries are admitted to home health agencies, the current appeals process may not help them. Medicare requires home health agencies to inform beneficiaries when they believe Medicare no longer will cover the cost of their care. When agencies anticipate they will be financially liable for a patient's care and decide to discharge patients or reduce their services, beneficiaries have the right to "demand bill" Medicare. That is, beneficiaries can demand that the home health agencies submit bills on their behalf to determine if the service will be covered. In the meantime, however, beneficiaries are responsible for the cost of the care the agency provides.

RECOMMENDATION 6E

The Secretary should improve the applicability of the Medicare ~~fee-for-~~ service appeals process for home health users and establish a mechanism for informing beneficiaries about their rights to appeal determinations of noncoverage by home health agencies.

According to the panelists, beneficiaries often do not know about the appeals process or their right to demand bill. When the PPS for hospitals took effect, beneficiaries were given the right to appeal decisions to discharge them, although the hospitals did not always inform them of their rights to appeal (ProPAC 1986). A similar situation could be avoided by requiring home health agencies to inform beneficiaries of their rights upon admission. HCFA also could require agencies to use a standard form explaining the reasons for restricting or terminating services and listing steps for beneficiaries to follow to get a formal decision from the Medicare fiscal intermediary about coverage and eligibility. In the long term, peer review organizations could review discharges from home health agencies as they do for hospital discharges.

HCFA is working to improve its appeals process for home health users. The agency is in the early stages of developing regulations to make the Part A and Part B appeals processes consistent. These regulations will not address the denials described above. In response to litigation on this issue, the agency also is considering distributing new notification letters to beneficiaries to explain their appeal rights. However, limits on computer systems stemming from the year 2000 problem may be the deciding factor in determining whether this policy is implemented.

The Commission believes an improved appeals process is an important measure to protect rights of beneficiaries to home health services. Combined with the other recommendations in this chapter, it will help to ensure that Medicare beneficiaries have access to appropriate home health services. ■

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C H A P T E R

7

Improving care at the end of life

R E C O M M E N D A T I O N S

The Secretary of Health and Human Services **should—**

7A make end-of-life care a national quality improvement priority for Medicare+Choice and traditional Medicare.

.....

7B support research on care at the end of life, and work with nongovernmental organizations as they (1) educate the health care profession and the public about care at the end of life, and (2) develop measures to accredit health care organizations and provide public accountability for the quality of end-of-life care.

.....

7C sponsor projects to develop and test measures of the quality of end-of-life care for Medicare beneficiaries, and enlist quality improvement organizations and Medicare+Choice plans to implement quality improvement programs for care at the end of life.

.....

7D promote advance care planning by practitioners and patients well before terminal health crises occur.

Improving care at the end of life

Nearly 2 million Medicare beneficiaries die each year. Too many of their physical, emotional, and other needs go unmet, although good care could minimize or eliminate this unnecessary suffering. Even hospices—which pioneered care for the dying—help only a small fraction of patients and are often used far later than they should be. The Medicare Payment Advisory Commission joins many others in finding the present situation unacceptable. Ensuring that beneficiaries receive humane, appropriate care at the end of their lives should be a priority for the Medicare program. This chapter describes ways in which Medicare can improve care for the dying.

In this chapter

- Using measures of quality to improve care at the end of life
 - Increasing the use of advance care planning
 - End-of-life care and Medicare's hospice benefit
-

The nature of dying has changed since the times when most deaths were sudden and unexpected. Today, the principal causes of death for Medicare beneficiaries are chronic heart failure, chronic lung disease, dementia, stroke, and cancer. As a result, the dying process is now typically long and protracted, and it is usually associated with chronic illness and disability. Intermittent, but increasing, social and health care support is needed during this final phase of life. Curative and palliative treatment must often be combined in various ways. In short, the "end of life" can stretch over a period of years, placing significant new demands on our social and health care systems.

The gap between ideal care and the care now given to beneficiaries is wider in end-of-life care than in probably any other area of medicine. The Medicare Payment Advisory Commission (MedPAC) believes closing this gap should be a priority for the Medicare program.

RECOMMENDATION 7A

The Secretary of Health and Human Services should make end-of-life care a national quality improvement priority for Medicare+Choice and traditional Medicare.

Numerous factors account for our deficiencies in caring for the dying, but perhaps the most important is the nearly exclusive cultural and technical orientation of American medicine toward curative rather than palliative treatment. Much knowledge of effective palliative care exists, but it has been infrequently taught to health care professionals and infrequently put into practice (Quill and Billings 1998). The public also could benefit from learning more about end-of-life care. In earlier times, choosing from among treatment options for the dying process was not necessary. It now often is. Dying patients and their loved ones need to play an active role in securing a "good death" that reflects their wishes and meets their needs.

To improve care at the end of life, progress is needed in at least three areas:

- learning how to provide better care at the end of life,
- educating the health care profession and the public, and
- delivering and paying for care at the end of life.

More research is clearly needed: basic research on the dying process and symptoms at the end of life, clinical research on care that meets the needs of the dying, and health services research on how best to fund and deliver care. The federal government issued a program announcement in 1997 for research on how to treat symptoms of dying patients, but it apparently did not result in the funding of any research studies. A new request for applications (NR-99-004) seeks to fund 10 to 12 studies to generate scientific knowledge that will lead to improved care at the end of life.

Fostering professional and public education about good end-of-life care is probably the single best way to improve that care quickly. Physicians, for example, should be trained in end-of-life care from the beginning preclinical years through residency and beyond (Barnard et al. 1999). The profession has begun to meet this challenge. The American Medical Association, for example, created the Education for Physicians on End-of-life Care (EPEC) program, which has trained some 250 physician educators to teach their peers about end-of-life care. Other professional organizations are educating physicians, nurses, and the public about care for the dying (ACP-ASIM Observer 1998, American Association of Colleges of Nursing 1998). The American Board of Internal Medicine, other specialty boards, and residency review committees have begun to require training in end-of-life care for professional certification. California is considering whether to require continuing medical education in pain management as a condition for relicensure (Gianelli 1999). Medicare should encourage these efforts and monitor their progress.

Accreditation and the publication of information about the performance of health care organizations—such as health plans, hospitals, hospices, and medical groups—can provide additional incentives to improve care at the end of life. Nongovernmental groups, including the Joint Commission on Accreditation of Healthcare Organizations, the National Committee for Quality Assurance, the Foundation for Accountability, and the National Hospice Organization, are developing measures of quality for end-of-life care. These measures can be used for accreditation and for public comparisons of quality. They need to be broadly applicable for use by payers and the public. As the principal payer for care at the end of life in the United States, Medicare should ensure that these measures meet its needs.

Some work has been done on how to best deliver good end-of-life care. For example, the Center to Improve Care for the Dying collaborated with the Institute for Healthcare Improvement to improve care for the dying, and many other organizations and institutions are making formal efforts to improve such care (IOM 1997). But much innovation and testing are still needed to develop better systems for delivering care at the end of life. Needed services should be provided seamlessly despite fragmented delivery systems, for example, and continuity both in caregivers and approaches to care must be assured.

Payment policies also should promote the provision of needed care. Risk adjustment or other methods may need to be developed, for example, to pay capitated delivery systems enough to provide effective palliative care. The Health Care Financing Administration (HCFA) created a palliative care diagnosis code in 1996 to determine whether a new diagnosis-related group (DRG) was needed to pay hospitals for palliative care (Cassel and Vladeck 1996). The agency found that spending and lengths of stay were not significantly different within

DRGs for hospital stays in which palliative care was given and those in which it was not given. HCFA concluded that the evidence to date did not demonstrate a need to create a new DRG for palliative care (HCFA 1998). However, the agency's research method does not seem appropriate for answering the principal question, which is whether a new DRG is needed when the primary purpose of an admission is palliative care.

RECOMMENDATION 7B

The Secretary should support research on care at the end of life, and work with nongovernmental organizations as they (1) educate the health care profession and the public about care at the end of life, and (2) develop measures to accredit health care organizations and provide public accountability for the quality of end-of-life care.

The rest of this chapter describes selected ways in which Medicare can improve care for beneficiaries at the end of life. The next section discusses the importance of quality measures for end-of-life care and how Medicare can use such measures in quality improvement programs. The challenge for Medicare is to push for the development and implementation of quality measures and quality improvement programs for care at the end of life as quickly as possible, while not moving beyond what the state of the art can reasonably support. The chapter also analyzes the limited effectiveness of advance directives and suggests that federal policy focus instead on advance care planning. The last section explains the limitations of the Medicare hospice benefit and the challenges involved in extending palliative care to all beneficiaries who need it.

Using measures of quality to improve end-of-life care

Quality measures for end-of-life care vary in their state of development, but some are good enough to enable traditional

Medicare and Medicare+Choice plans to begin quality improvement programs for at least some aspects of end-of-life care. Rigorous measures are being developed for accreditation and public accountability for the quality of care at the end of life, but it will be longer before a comprehensive set of such measures is in place.

RECOMMENDATION 7C

The Secretary should sponsor projects to develop and test measures of the quality of end-of-life care for Medicare beneficiaries, and enlist quality improvement organizations and Medicare+Choice plans to implement quality improvement programs for care at the end of life.

Measuring quality is central to improving it

To improve quality, one must be able to define and measure it. Providers have to know what they are trying to change and whether they are successful. This fundamental insight underlies two models of quality improvement in health care. In the continuous quality improvement or total quality management approach, organizations create an internal climate of quality improvement. Throughout the organization, people identify and measure important processes and outcomes, change the delivery system, assess the effect of those changes, and continuously repeat cycles of improvement.

A second and complementary approach is competition on quality. Under this model, health care organizations produce information on their performance for purchasers and consumers to use. Public information on performance can be seen as both a right of consumers to vital information about their health care and a spur to providers to do better.

Although both of these approaches to quality improvement rely on measures of quality, they do not place the same level of stress on the measures. Far more is required of measures used for public comparisons

and accountability. These measures must be highly defensible if they are to affect the credentialing, selection, and payment of providers. The data must be defined and collected consistently across organizations and sites of care. Data collection should be relatively complete, and the number of observations must be great enough to reveal statistically significant differences. Finally, risk adjustment of the measures is critical to account for differences in the populations being compared.

Internal quality improvement, by contrast, demands less of quality measures. Providers can often take into account imperfections in the data and the measures, and the measurement process can evolve quickly as learning progresses about what needs to be measured and how to measure it (Lasker et al. 1992).

Efforts to develop measures of quality of end-of-life care

Researchers have made substantial progress in conceptualizing the important domains that should be addressed by high-quality care at the end of life and hence by measures of quality (Stewart et al. 1999). Experts do not agree on a single best conception, but the various proposals overlap considerably (see Table 7-1).

In 1996, a group of experts began to assemble a tool kit of available instruments to assess the quality of care in many of these domains (IOM 1997; Toolkit 1999). Since then, numerous initiatives have adapted, developed, and tested new measures, although the state of the art is uneven. Many measures need to be refined, validated for dying Medicare patients, and tested for responsiveness to changes in the item being measured.

Pain has been the most studied physical symptom. Knowledge of how to treat pain effectively is substantial, and good process and outcome measures have been refined, validated, and made available for use (Toolkit 1999). For other physical symptoms, such as fatigue, shortness of

**TABLE
7-1**

Comparison of several conceptions of the domains of quality **care** at the end of life

	Singer et al. 1999	Emanuel and Emanuel 1998	Institute of Medicine 1997	American Geriatrics Society 1997
Overall			Overall quality of life	Global quality of life
Physical	Receiving adequate pain and symptom management	Physical symptoms	Physical well-being and functioning	Support of function and autonomy
Emotional		Psychological and cognitive symptoms	Psychosocial well-being and functioning	Physical and emotional symptoms
Social	Strengthening relationships	Social relationships and support	Psychosocial well-being and functioning	
Spiritual		Spiritual and existential needs	Spiritual well-being	
Control	Achieving a sense of control; avoiding inappropriate prolongation of dying			Advance care planning; aggressive care near death
Satisfaction			Patient perceptions of care; family perceptions and well-being	Patient and family satisfaction
Family	Relieving burden	Economic demands and caregiving needs	Family perceptions and well-being	Family burden; bereavement
Other		Hopes and expectations		Provider continuity and skill; survival time

breath, anorexia, and nausea, knowledge of effective treatment and the state of assessment instruments vary.

Validated assessment instruments exist for many types of emotional and psychological symptoms, such as depression and anxiety, but they often need to be adapted for patients at the end of life. The 1996 toolkit included nine measures of emotional symptoms. Similarly, social functioning is often considered an important end-of-life

domain, but existing measures need to be adapted and validated for patients at the end of life (Emanuel and Emanuel 1998).

The 1996 tool kit contained 17 measures of spiritual and religious well-being, but little is known about how to use them and improve the spiritual condition of dying patients (Emanuel and Emanuel 1998). Hopes and expectations are similarly deemed important, but there is scant knowledge or consensus on what to do about them.

Control over care while dying is an important goal that patients value (Singer et al. 1999). Process measures involving advance directives and concordance of treatment with patients' wishes have been used in several studies.

The tool kit in 1996 contained 13 measures of satisfaction with care, a standard component of quality in general. In this area, a family's satisfaction with care is typically assessed some time after the patient's death. Economic and

caregiving burdens on the patients' families (broadly conceived) are important to both patients and families. Various measures of these burdens might be used.

Some difficult challenges complicate the assessment of the quality of care at the end of life (IOM 1997, Rudberg et al. 1997). These include:

- Subjectivity. Many measures are necessarily subjective. This does not mean they cannot be assessed accurately, but it requires that instruments be carefully developed, tested, and interpreted.
- Choice of respondent. Patients near the end of life may not be physically, mentally, or emotionally able to participate in quality assessment. Surrogates often need to be used, but the choice of surrogates may not be straightforward. In addition, their responses may differ from those that the patient would have given.
- Time of sampling. The dying process is one of ongoing change, and it differs among patients. Because

patients' priorities and the care they require also change over time, quality of care would optimally be measured at multiple times. Different measures of quality of care may be needed at different times. The sole uniform benchmark in the process—the time of death—can only be known after the fact.

- Case finding. Identifying the patients whose care should be studied can be problematic. Some diseases, including many forms of cancer, have clearly identifiable times of diagnosis and fairly predictable downward courses. The majority of Medicare patients who die, however, succumb to chronic illnesses they have lived with for some time. Their periodic acute declines, recoveries, and ultimately fatal crisis are not readily predictable. Criteria need to be developed to select whose care should be studied among the many patients with chronic and ultimately fatal illnesses.
- Burden and cost. The preceding challenges can make assessing the

quality of end-of-life care burdensome and costly. Measures and measurement processes need to be devised that consume acceptable amounts of resources.

Notwithstanding these challenges, many organizations are developing, testing, and using new measures of quality of end-of-life care. These initiatives are likely to produce additional usable quality measures in the near future.

Although the extent of activity in developing and testing quality measures is encouraging, much more is needed to assess and improve the end-of-life care received by Medicare beneficiaries. The current activities are relatively small in scale. The measures typically need to be validated and sometimes adapted for Medicare populations.

The scale of the federal effort in this area seems inadequate to the task. Of the 10 research studies currently funded by the Department of Health and Human Services that principally address aspects of care at the end of life, only one seeks to develop instruments that could help assess quality of care. An additional 10 to

Organizations developing, testing, and using measures of quality of end-of-life care

The Robert Wood Johnson Foundation is supporting continued work on the tool kit of quality measures for end-of-life care (Teno 1999).

The United Hospital Fund is sponsoring a demonstration project in five New York hospitals that includes assessment tools developed or adapted by each hospital (Hopper 1999).

The Department of Veterans Affairs is trying to improve palliative and end-of-life care using performance measures of outcomes and processes.

The Joint Commission on Accreditation of Healthcare

Organizations is preparing new standards for pain assessment and management (Dahl 1999).

The National Hospice Organization is developing a set of performance measures, including outcomes measures, for hospice care (Connor 1999).

Shugoll Research is developing a core set of national quality indicators for end-of-life care (Jackman 1999).

The Center to Improve Care for the Dying is organizing a demonstration called "MediCaring" for chronically ill patients who do not yet qualify for hospice care (Skolnick 1998).

The Institute for Healthcare Improvement collaborated with the Center to Improve Care for the Dying on a project to improve end-of-life care (IOM 1997).

University of Washington researchers are preparing a set of peer evaluation measures for end-of-life care (Wennrich 1999).

The Project on Death in America has funded work to assess the quality of palliative care given to inpatients (Sulmasy 1999).

The Foundation for Accountability is developing a set of instruments for public comparisons and accountability for quality of care at the end of life (Bethell 1999). ■

12 projects will be funded late this year under Request for Application (RFA) NR-99-004 on "Research on Care at the End of Life," but measure development is only 1 of 27 suggested topic areas.

Relevant studies could qualify for funding this year under another RFA (HS-99-001), "Measures of Quality of Care for Vulnerable Populations." Terminal illness qualifies as 1 of 13 factors that can produce vulnerability. One-third of the available funds are set aside for six clinical areas that do not directly include care at the end of life, however, and the RFA expresses a preference for studies of non-Medicare populations.

How can Medicare use quality measures to improve care at the end of life?

Medicare currently has two direct means to enhance the quality of care its beneficiaries receive. The traditional Medicare fee-for-service program uses the quality improvement organizations (QIOs) to carry out local and national quality improvement projects.¹ The Medicare+Choice program is implementing the new Quality Improvement System for Managed Care (QISMC), which prescribes standards for the internal quality improvement activities of Medicare+Choice plans (MedPAC 1999). Both can use the quality measures being developed to stimulate providers to begin quality improvement cycles for end-of-life care.

The QIOs are now required to perform a mix of national and local quality improvement projects. For all the QIOs, six national targets for improvement were selected in clinical areas in which quality standards and measures are well developed.² Each QIO is also required to undertake local projects, with the subject of each project determined by the QIO based on its interests, capabilities, and perceptions of local needs.

Given the early stage of development of quality measures for care at the end of life, it would be premature for the QIO program to adopt a new national quality improvement program for end-of-life care. But, just as in the private sector, the opportunity is ripe for QIOs to initiate a variety of projects addressing different aspects of care at the end of life. In addition, these projects could validate and compare measures of quality of care for use in the Medicare program.

If QIO projects begin soon, in two to three years HCFA will be well on its way to understanding what works to improve care at the end of life in the fee-for-service Medicare program. The information from QIO projects and the many nongovernmental initiatives under way could then be used to evaluate care at the end of life to the level of a national quality improvement focus for the QIO program.

Improving care at the end of life should be a goal for Medicare+Choice plans as well. Medicare+Choice plans can allocate resources flexibly to meet beneficiaries needs, which offers an exciting opportunity for innovation and improvement in end-of-life care. HCFA can use QISMC to stimulate health plan activities by:

- developing and promulgating quality measures for end-of-life care that can be used by health plans to meet QISMC standards.
- using its "deeming" authority to encourage compliance with private accrediting organizations' standards for care at the end of life as they are developed.
- encouraging health plans to choose end-of-life care as the subject of quality improvement projects, and supporting these projects.

Increasing the use of advance care planning

An important domain of quality care at the end of life is ensuring that patients control their own care. This goal has not been met. The barriers to success are formidable, yet giving patients meaningful control of their care is essential for respecting personal and cultural differences at the end of life.

This section analyzes the limited effectiveness of current federal policy on advance directives as embodied by the Patient Self-Determination Act. It suggests how policy could refocus more broadly on advance care planning rather than on advance directives.

RECOMMENDATION 7D

The Secretary should promote advance care planning by practitioners and patients well before terminal health crises occur.

The limits of the Patient Self-Determination Act and advance directives

The Patient Self-Determination Act (PSDA) represents a unique federal attempt to improve care at the end of life. The law requires hospitals and other health care institutions to inform patients about advance directives and to incorporate any advance directive into their medical records. Its intent is to promote the use of advance directives and ensure that patients' care is consistent with their preferences.

In practice, the PSDA has had limited effectiveness (IOM 1997). The number of patients with advance directives has increased somewhat, although this may be due partly to a secular trend. The PSDA has not prompted higher rates of discussions between patients and physicians about advance care planning

¹ The organizations now prefer to be called quality improvement organizations because they believe this name reflects the scope and orientation of their current responsibilities better than peer review organizations, the term used in statute and by HCFA.

² The six target areas are acute myocardial infarction, flu and pneumonia, heart failure, stroke, diabetes, and breast cancer.

(Emanuel et al. 1993). When an admitting clerk fulfills the requirements of the PSDA as part of the admission process—as is often the case—a meaningful conversation or decision about advance directives is unlikely. A minority of the population has completed advance directives, and only a minority of advance directives become known to the treating physicians. Advance directives are often unavailable to paramedics and physicians when a patient becomes acutely ill (Morrison et al. 1995). This is a system problem (see Chapter 3).

Studies also have failed to show an appreciable effect of advance directives on care (Miles et al. 1996). Even one study's determined effort to improve communication about advance directives and care preferences among inpatients, families, and their physicians was largely unsuccessful in improving care, perhaps in part because the discussions took place during hospitalizations for acute illness (Teno et al. 1997).

Cultural differences can pose a barrier to the increased use of advance directives. The values underlying advance directives may not be shared by non-European American cultures (Ersek et al. 1998). Korean and Mexican Americans, for example, are more likely to favor a family-oriented model of medical decisionmaking as compared to the patient autonomy model that underlies advance directives (Blackhall et al. 1995). Traditional Navajo culture avoids negative thoughts and concepts; one study concluded that advance care planning violates traditional Navajo values (Carrese and Rhodes 1995).

African Americans discuss and complete advance directives less often than whites. When asked, they also more often express preferences for aggressive treatment. It is not known whether these differences reflect cultural values, mistrust of the health care system, qualitative differences in interactions when patients and physicians are of different races, or other factors (Silverman et al. 1995, Shepardson et al. 1999).

Shifting the focus of policy to advance care planning

One response to the difficulties experienced with advance directives is to refocus attention more broadly on advance care planning, one product of which can be an advance directive. The most important aspect of this approach is the planning process and the interactions that occur because of it, not any particular document (Singer et al. 1998, Teno and Lynn 1996).

A key feature of advance care planning is that it should encompass more than planning for decisions that will be made when the patient is incompetent. One physician articulated this philosophy by describing advance care planning as having three parts (Gillick 1995). First, patients need to understand their overall medical condition and the likely course of their illness. Second, they should be able to appreciate what the experience of treatment would be like for them. Finally, they need to formulate broad goals for their care and delineate circumstances in which palliative or curative treatment would be indicated. This process is especially appropriate for patients with chronic illnesses that are not imminently fatal and that require a dynamic mix of curative and palliative treatment.

Medicare could promote advance care planning in several ways:

- by informing physicians how they can be paid for it,
- by supporting the refinement of measures of the quality of advance care planning, and
- by stimulating innovative programs to promote advance care planning.

Paying physicians for advance care planning

Medicare payment policy already supports advance care planning. If it constitutes the principal part (more than 50 percent) of a physician visit, physicians can bill for advance care planning using standard evaluation and management codes (for example, established patient office visit), with the

level of service being determined by the length of the visit.

Medicare's payment policy should encourage physicians to schedule visits for advance care planning, but the policy is not widely known or understood, based on telephone conversations with a sample of experts on end-of-life care and with members of specialty societies' payment policy committees. MedPAC found that some experts did not think advance care planning could be billed as a separate service, while others made incorrect recommendations for billing for it (for example, by using the preventive medicine counseling codes, which are reserved for risk factor reduction counseling with healthy individuals). HCFA should clarify and publicize the availability of payment for advance care planning under the Medicare Fee Schedule.

Measuring the quality of advance care planning

The analysis in this chapter of quality measures for end-of-life care in general applies to advance care planning as a specific example. To improve the performance of this aspect of the health care system, measures are needed to identify good advance care planning. The federal government should support the development and testing of such measures as part of its broader support for developing quality measures for end-of-life care. First-generation measures exist; they need to be refined and tested in varied settings. For example, the Department of Veterans Affairs is using measures of advance care planning in an effort to improve palliative and end-of-life care. And the tool kit of quality measures for end-of-life care contains usable measures of the quality of advance care planning (Toolkit 1999).

Increasing the use and effectiveness of advance care planning

Many efforts have been made to improve the rate of advance care planning and to increase compliance with the resulting expressed preferences, but the gains have

been relatively modest (Miles et al. 1996). Innovation is needed to make substantial progress.

Successful models do exist. In one initiative to improve the use of advance care planning, competing health systems in La Crosse, Wisconsin, developed a joint program in 1991 (Hammes and Rooney 1998). This continuing program, called "Respecting Your Choices," has three key features: (Hammes 1999a).

- Education. The cooperative program developed and distributed a range of educational materials for people with different levels of knowledge about advance care planning and advance directives. The program also used a formal initial course and periodic refresher seminars to train more than 350 nonphysicians—including social workers, chaplains, and community volunteers—as advance care planning educators. These educators' sessions with patients focused on understanding, reflection, communication, and relationships, not primarily on completing an advance directive.
- Community outreach. The educational materials and advance care planning educators were available in community settings. Educational conferences and meetings were held for community lawyers, clergy, and other service groups that requested them.
- Institutional infrastructure. Participating health care institutions changed policies and procedures, such as the handling of medical records, to ensure that advance care planning documents were prominently included in each patient's active floor chart.

In 1995 and 1996, investigators formally evaluated the use of advance directives and compliance with them during care at the end of life. Researchers studied all

deaths in one geographic area during an 11-month period. Of 540 decedents studied, there was written evidence of advance care planning (power of attorney for health care, instructive documents such as a living will, or physician notes documenting a discussion with the patient) for 85 percent of them. The median time between the documentation of advance care planning and death was more than one year.

Even more impressive was the extent to which care at the end of life followed the advance care planning. Of decedents with documented advance care planning, 95 percent had the document in their medical records at the time of death, and treatment decisions were consistent with the document 98 percent of the time. Even in the relatively few instances of apparent inconsistency, patients' preferences generally did not seem carelessly disregarded. Sixteen times, for example, patients were hospitalized contrary to their documented preference. Six of these patients were competent and decided to be admitted, and two were admitted for pain management. In the remaining eight cases, the family requested hospitalization. Overall, people with documented advance care planning were seven times more likely to die outside of the hospital than those without it (Hammes 1999b).

A five-year process to improve end-of-life care in Oregon nursing homes has also yielded impressive results (Teno 1998). In addition to the development and use of a new written advance directive, state policies and institutional processes were reformed to promote advance care planning and improve end-of-life care.

Medicare's QIOs and Medicare+Choice plans have a promising foundation on which to build, although the La Crosse and Oregon programs may not directly translate to all communities. Promoting advance directives and advance care planning may be more difficult with

some populations, depending on their ethnic and cultural makeup, access to health care, and socioeconomic status. In trying different, innovative approaches, identifying and respecting cultural differences is particularly critical.

End-of life care and Medicare's hospice benefit

Hospice care typically addresses many aspects of quality end-of-life care (see Table 7-1). This approach to treatment recognizes that impending death may make palliative care more desirable than curative care. The goal of hospice care is to help terminally ill patients continue as normal a life as possible and remain uninstitutionalized. Using a multidisciplinary team of providers, hospices provide medical, social, psychological, and spiritual care to patients and respite care and counseling for patients' families. Hospices' coordination of care to provide comfort in the final stages of a terminal disease can be a welcome alternative for patients who do not want aggressive treatment in a hospital.

Hospices are the primary institutional providers of palliative care in the Medicare program. The growth of hospice care in Medicare and through other public and private payers indicates that the so-called hospice movement has tapped significant public demand. Since their entry in the Medicare program in 1983, hospices generally have "demonstrated excellent care" for the population that they serve (Lynn and Wilkinson 1997).

The number of hospices and total Medicare spending on hospice services have grown considerably in recent years, with Medicare spending on hospice care exceeding \$2 billion in 1997 (see Table 7-2). Medicare finances about two-thirds of all hospice spending.

Through a combination of Medicare eligibility rules, hospice admission policies, and other factors, however, a number of patients who could benefit from the services of hospices are excluded from such treatment. Patients may have difficulty getting care because of the types of diseases they have, their home living arrangements, or cultural factors.

**TABLE
7-2**

Medicare hospices and spending, 1991-1997

Year	Total spending (millions)	Spending per beneficiary	Number of hospices
1991	\$533	\$4,365	1,011
1992	1,095	5,304	1,039
1993	1,243	5,779	1,288
1994	1,614	6,069	1,602
1995	1,873	6,056	1,857
1996	1,999	6,120	2,090
1997	2,211	N A	2,133

Source: HCFA Office of the Actuary and Federal Register, October 5, 1998

Medicare payment rules for hospices

Beneficiary election of hospice care Medicare covers hospice care for beneficiaries who elect the benefit and are certified by a hospice medical director and an attending physician as terminally ill, with less than six months to live if the disease follows its usual course. A patient who opts for hospice care waives all rights for curative care under the Medicare program for illness related to the terminal condition. Medicare will continue to cover illnesses and injuries unrelated to the terminal condition and outside the hospice plan of care.

The initial benefit period is 90 days, which may be followed by another 90 days of coverage. Subsequently, a beneficiary may elect an unlimited number of 60-day benefit periods. The hospice medical director must recertify that the patient is terminally ill at the beginning of each 60-day period.

At any time, a beneficiary may opt out of hospice care and seek curative treatment for the terminal illness. Beneficiaries also may change their designated hospice once in each election period.

payment for hospice services

Medicare pays prospective, per diem rates for hospice care. There are four rates, depending on the location and type of service provided. Payment is made for only one type of service per day:

- Continuous home care. Patients receive nursing care and sometimes home health aide or homemaker services continually at home. Continuous home care is furnished only during periods of crisis and only as required to maintain patients at home.
- Routine home care. Patients stay at home but do not receive continuous care as defined above.
- General inpatient care. Patients receive care in an inpatient facility to control pain or manage acute symptoms that cannot be managed in another setting.
- Inpatient respite care. Patients receive short-term care at a facility to relieve family caregivers.

Medicare pays the routine home care rate unless patients require continuous or inpatient care. Inpatient care days (respite or general) may not exceed 20 percent of all patient care days. Further, reimbursement to any hospice is

subject to an annual cap per beneficiary. Legislation instituted the cap at \$6,500 per year in 1984, updated by the medical consumer price index each year. The cap is now above \$14,000. Unique among providers participating in the Medicare program, hospices must employ unpaid volunteers for a minimum of 5 percent of total patient care hours.

The national rates for each category of care per diem will be updated by the hospital market basket index minus 1 percent for fiscal years 1998 through 2002. The labor portion of each of the four per diem rates is adjusted by a county-specific wage index based on hospital cost report data from 1993.

Beneficiaries' only out-of-pocket expenses for hospice care are a maximum \$5 copayment for drugs or biologicals and 5 percent of the rate for a day of inpatient respite care, subject to an annual limit equal to the inpatient hospital deductible. Normal copayments and deductibles apply for services that are not considered hospice care.

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Medicare payment rules for hospices

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Types of hospice services

With some exceptions for nonurban areas, hospice employees must provide what regulations classify as the hospice core services. These are nursing services; medical social services; and bereavement, spiritual, and dietary counseling. In addition to the core services, the hospice must provide or contract to provide physicians' services, physical and occupational therapy, speech-language pathology, home health aide and homemaker services, medical supplies and appliances, and short-term inpatient care.

Hospice and Medicare+Choice

Beneficiaries enrolled in Medicare+Choice plans have access to hospices. When plan enrollees elect the hospice benefit, HCFA directly pays the hospice for their care, and the payment to the Medicare+Choice plan is reduced.

The principle of organized care on which most Medicare+Choice plans operate fits well with hospice care. Hospices provide an interdisciplinary team that coordinates care across providers and settings. One Medicare+Choice organization, which operates its own hospice, coordinates

end-of-life care for congestive heart failure and chronic obstructive pulmonary disease patients. Patients are treated with a combination of palliative and life-extending treatment when appropriate. Until patients are eligible to elect hospice under the six-month prognosis rule, care is provided primarily under the auspices of home health care. Both before and after hospice election, the patients have access to a physician, nurse, and social worker for themselves and family members. The goal is to make care as seamless as possible through the transition from the pre- to post-election periods. ■

Access issues and hospice eligibility rules

Most Medicare hospice patients have cancer. Because Medicare eligibility for hospice hinges on patients' prognoses of six or fewer months to live, the Medicare rules generally accommodate the trajectory of cancer patients' decline, which for most types of cancers is predictable and rapid in the end stages.

People with terminal chronic conditions for which the decline is not as rapid or predictable, such as congestive heart failure (CHF) or chronic obstructive pulmonary disease (COPD), could benefit from the services of a hospice but often are not able to do so (Lynn and Wilkinson 1997, MedPAC 1998). For such patients, the trajectory of decline is usually longer than for cancer patients and is punctuated by difficult-to-predict acute events, thus estimates of a six-month survival time for a CHF or COPD patient, to enable hospice eligibility, can be difficult to predict. Moreover, because of recent investigations by the Office of Inspector

General examining long hospice stays, physicians may be reluctant to make six-month diagnoses in all but the clearest cases to avoid any perception of fraud. In such instances, the patient may be admitted to the hospice either after hospice services may be of optimal value, or not at all.

Medicare rules allow only those who have elected the hospice benefit to receive services from hospice providers, and Medicare generally limits hospices to providing only palliative care. Thus a gap in care can arise for those suffering from chronic diseases who could benefit from life-extending treatment as well as palliative care. Because all patients who elect hospice care must have access to the full array of services, hospices cannot serve patients who have not formally elected the benefit but may desire certain targeted palliative services before they are eligible.

Settings beyond hospices for coordinated end-of-life care should be researched and tested. The duration and severity of

different illnesses vary over their normal courses, resulting in varying patient needs. Further study of the course of chronic and terminal diseases such as COPD, CHF, and Alzheimer's disease could lead to a coordinated care system that provides appropriate care at the appropriate time.

Hospice patients and home care

The Medicare rules that limit inpatient care for beneficiaries electing hospice care result in patients spending most of their treatment time at home. Indeed, hospice treatment was originally designed for patients to spend their last days in a familiar and comfortable home setting with loved ones. But as patients' conditions deteriorate, they need more help from informal caregivers, usually family members.

Medicare rules do not require hospice patients to have designated informal caregivers, but managing illness is difficult without them. According to the

National Hospice Organization, 13 percent of hospices will not accept patients at all without designated primary caregivers, and 27 percent decide case-by-case whether to admit patients without them. Therefore, patients with weak, strained, or nonexistent family contacts may not be able to get hospice care.

Cultural factors and hospice care

Compounding eligibility and home care difficulties can be a range of cultural factors related to death and the process of dying. First, the scientific orientation of the mainstream culture of medicine and the desires of the public often result in providers, patients, and families continuing with curative therapies rather than “giving up” and “abandoning” a patient to hospice (Merritt et al. 1998). Medical education curricula pay little attention to end-of-life treatment. The parsimonious training of medical personnel in end-of-life issues often contributes to decisions to continue curative treatment that may be of dubious value to the dying patient.

Second, cultural and language barriers among providers, patients, and patients’ families can inhibit frank discussion of hospice options. Such decisions are often the most difficult of a lifetime, and people can have different cultural constructions of the meaning of death and the need to make end-of-life decisions. In any context, however, clear and thoughtful discussion is necessary. Hospices, though, may not be in the best position to serve people from a wide range of cultures. One hospice executive maintains that hospices “are successful in addressing the needs of middle class, white, elderly persons with cancer who have family members to care for them at home. However, there is a need to provide better access to care within diverse settings and for diverse populations” (Brenner 1997). Further, the National Hospice Organization identified hospice staff deficiencies in fluency with non-English languages and familiarity with diverse cultures as important barriers to hospice care (National Hospice Organization 1994). Hospices are likely to find the

means necessary to broaden their outreach to eligible patients of all backgrounds, however, as the industry grows and competition for patients increases.

The future of hospice care

The ability to address the challenges of eligibility, access, and communication, as well as a changing health care system, will determine the future of the Medicare hospice program. As noted in this chapter, changes in care at the end of life are likely in the near future. To find the best ways to care for all beneficiaries at the end of life, Medicare should draw on the experience it has gained in successfully running hospice programs. For their part, hospices should strive to serve those who are eligible for, and who want, their services and also should work with other providers, as appropriate, to research better coordinated end-of-life care. ■

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C H A P T E R

8

**Improving the quality of
care for beneficiaries with
end-stage renal disease**

R E C O M M E N D A T I O N S

8A The Secretary should determine clinical criteria for dialysis patients to receive increased frequency or duration of dialysis. The Secretary should then examine the feasibility of a multitiered composite rate that would allow different payments based on the frequency and duration of dialysis prescribed, as well as other factors related to adequacy of dialysis.

.....

8B MedPAC reiterates the recommendation made in its March 1998 and March 1999 reports calling for an increase in the composite rate.

.....

8C The Secretary should determine clinical criteria for ESRD patients to be eligible for oral, enteral, or parenteral nutritional supplements. Coverage for these supplements should then be provided to eligible ESRD patients as a renal benefit apart from the composite rate.

.....

8D In fulfilling the requirements of the BBA regarding improving the quality of dialysis care, the Secretary should take into consideration the quality assessment and assurance efforts of renal organizations.

Improving the quality of care for **beneficiaries** with end-stage renal disease

In this chapter

- Patient population and treatment
- Quality of dialysis care

Medicare's payment for dialysis, which has not increased since 1991, affects the quality of care for dialysis patients. Payment policies for treating anemia and malnutrition-complications of end-stage renal disease-also may affect the quality of care. The Medicare Payment Advisory Commission recommends that the Secretary of Health and Human Services improve the quality of dialysis care by modifying payments for dialysis, covering nutritional therapy for malnourished end-stage renal disease patients as a renal benefit, and considering the quality assessment and assurance efforts of renal organizations. Certain clinical outcomes and patient survival over the past five years have improved, but policy changes to permit higher doses of dialysis and appropriate clinical use of nutritional supplements could foster further improvement.

The Medicare end-stage renal disease (ESRD) program, established in 1973, provides entitlement to Medicare benefits for persons who require dialysis or a kidney transplant to maintain life. Beneficiaries must be fully insured or entitled to monthly benefits under Social Security or Railroad Retirement programs or the spouse or dependent child of an eligible beneficiary. This entitlement is nearly universal, covering 93 percent of all dialysis patients in the United States.

Many renal organizations claim that Medicare's policies have affected the quality of care provided to dialysis patients. Indeed, the Balanced Budget Act of 1997 (BBA) mandates the Secretary of Health and Human Services to develop "methods to measure and report on quality of renal dialysis services provided under Medicare (BBA 1997)." This is not the first time Congress has shown an interest in the quality of ESRD care. The Omnibus Budget Reconciliation Act of 1987 requested the Institute of Medicine (IOM) study aspects of the Medicare ESRD program, including the effect of reimbursement on quality of care (IOM 1991).

The Department of Health and Human Services oversees quality assessment and assurance in the ESRD program through both the Health Care Financing Administration (HCFA) and the Public Health Service. Traditionally, rates of mortality and hospital admission were used to measure quality of care. In the past decade, additional clinical indicators have emerged, including the adequacy of dialysis and patients' anemia and nutritional status.

This chapter presents recent evidence on the quality of renal dialysis in the United States and offers recommendations to improve the quality of dialysis care. Specifically, the Medicare Payment Advisory Commission (MedPAC) recommends that the Secretary of Health and Human Services:

- study alternative approaches to paying for dialysis to increase the dose of dialysis.

- cover nutritional supplements for malnourished ESRD patients as a renal benefit.
- consider the quality assessment and assurance efforts of renal organizations.

Patient population and treatment

During the first quarter-century of the Medicare ESRD program, the number of beneficiaries with ESRD increased nearly 30-fold, from approximately 10,000 people in 1973 to nearly 290,000 at the end of 1996. Until the early 1970s, patients receiving continuous renal replacement therapy usually were restricted to the relatively young without systemic illnesses. As clinical experience accumulated and treatment techniques improved, older patients and those with coexisting illnesses also were treated. Consequently, the demographic and clinical characteristics of the ESRD patient population have changed significantly over time.

For example, in 1996, patients age 65 and older constituted nearly half of all new ESRD patients, compared with one-quarter of all patients in 1978. Diabetes, a contraindication to treatment 30 years ago, is now the leading cause of ESRD and accounts for nearly 40 percent of new patients, compared to one-fifth of new patients in 1978.

At current rates of annual growth, HCFA estimates the ESRD population will nearly double every 10 years (HCFA 1998a). This prediction is not surprising, given the aging U.S. population, the increase in the incidence of diabetes with age, and the overall increase in the incidence of type II diabetes in the United States in the latter half of the 20th century.

The incidence of treated ESRD has increased worldwide since 1986. The United States had the highest incidence of treated ESRD, 276 patients per million population, in 1996. Japan (226 patients

per million) and Germany (1.53 patients per million) follow (USRDS 1998). Canada, France, Sweden, and Austria have treatment rates about one-half that of the United States. These varying rates reflect differences in the known proportion of patients accepted for treatment in each country. For example, the median age for treatment in the United States is very high relative to those of other countries. Studies also suggest the ESRD population in the United States has more comorbid conditions and that beyond the United States, larger proportions of women, elderly, and racial minorities die untreated (Friedman 1996). Prevalence of ESRD also varies among the United States and other countries. Japan had the highest prevalence of ESRD (1,397 per million), followed by the United States (1,131 per million) in 1996.

Before 1960, no treatment other than dietary modification was available. Since then, types of treatment options for patients with ESRD have grown to include hemodialysis, peritoneal dialysis, and transplantation. Despite payment policies that encourage home dialysis, in-center hemodialysis has been the most common treatment method in the United States for the past decade, with 61 percent of ESRD patients undergoing this procedure. Less than 1 percent of patients undergo home hemodialysis. About 10 percent undergo peritoneal dialysis, which includes continuous ambulatory and continuous cycling peritoneal dialysis. Finally, 27 percent of patients have a functioning kidney transplant (USRDS 1998).

During therapy for renal failure, patients may move from one treatment to another. Many factors influence the choice of treatment, including distance to a dialysis center; personal preference; and patients' education, socioeconomic status, comorbid conditions, and age. Nearly half of all children undergo peritoneal dialysis (mostly continuous cycling peritoneal dialysis), while hemodialysis use increases with age. Younger patients are more likely than older patients to receive kidney transplants.

Quality of dialysis care

The years since inception of the ESRD program have been distinguished by remarkable clinical achievements that have prolonged and improved the quality of life of affected patients.

Notwithstanding these achievements, renal researchers and organizations are concerned about the effect of Medicare's payment and coverage policies on quality of dialysis care. One issue is the contribution of the composite rate, which has not increased since 1991, to the inadequate dialysis researchers report. Medicare's coverage policies for interventions to treat anemia and malnutrition also may affect quality of care.

Because dialysis payments have not increased since 1991, MedPAC is concerned about the quality of dialysis care. In this section, we examine recent evidence of the quality of dialysis care, as measured by the following quality indicators:

- clinical outcomes, including the adequacy of dialysis and patients' anemia levels and nutritional status;
- morbidity, measured by rates of hospital admission; and
- mortality.

Quality measures for dialysis care

A prominent concept for measuring quality includes evaluating structure, processes, and outcomes of care (Donabedian 1966). Structures of care refer to the basic provisions of medical care, including the characteristics of providers, patients, and the health care system. Processes of care include both technical and behavioral aspects of medical care, such as the diagnosis, prescription, and delivery of treatment to patients, as well as the personal interactions between patients and clinicians. Outcomes of care include

mortality, rates of hospital admission, clinical outcomes, and patients' functional status, well-being, satisfaction, and quality of life.

Considerable uncertainty surrounds the measurement of quality of care-in any given clinical setting-as well as how best to convey information about quality to providers, payers, and patients. For dialysis patients, quality measurement traditionally has emphasized mortality and morbidity, as measured by rates of hospital admission. More recently, several biochemical markers related to morbidity and mortality have emerged as outcome measures; they measure adequacy of dialysis, anemia levels, and the nutritional status of patients.

Adequacy of dialysis

Adequate dialysis is defined as the amount of dialysis required to treat ESRD so that patients receive the full benefit of dialysis therapy. Adequacy is influenced by a number of patient-related factors (such as comorbidities, compliance with the prescribed dialysis regimen, adherence to salt and water intake limitations, and weight) and technical factors (such as duration and frequency of dialysis, vascular access, choice of dialyzer membrane, and blood and dialysate flow rate).

Inadequate dialysis shortens survival and leads to malnutrition, functional impairment, and decreased quality of life (Ifudu et al. 1998). A recent study also reported that increasing the level of dialysis in patients receiving inadequate dialysis improves their anemia status (Ifudu et al. 1996). Many renal organizations, as well as the IOM in its 1991 seminal report on the quality of ESRD care, have questioned whether Medicare's reimbursement system, in general, and the structure of the composite rate, in particular, have contributed to the delivery of inadequate dialysis. Prompted by an annual mortality rate approaching 25 percent among dialysis patients, a Consensus Development Conference Panel of the National Institutes of Health (NIH)

concluded that "the dose of hemodialysis and peritoneal dialysis has been suboptimal for many patients in the United States," and it called for an increase in the dialysis dose (Consensus Development Conference Panel 1995).

Two measures of adequacy of dialysis are the urea reduction ratio and Kt/V. The urea reduction ratio is the percentage reduction in blood urea nitrogen concentration during a single dialysis session and is usually measured once per month. Kt/V is a dimensionless index based on the dialyzer clearance rate (K), the time spent on dialysis (t), and the volume of fluid completely cleared of urea in a single treatment (V). The National Kidney Foundation (NKF), NIH, Renal Physicians Association (RPA), and HCFA have advocated a urea reduction ratio of 65 percent or more or a Kt/V of 1.2 or more as a threshold for adequate dialysis. Lower levels are associated with increased mortality, although the dose of dialysis beyond which further reductions in mortality do not occur is not well established.

Average values of the urea reduction ratio and Kt/V have steadily improved during this decade, according to clinical outcomes data HCFA has collected. For example, among hemodialysis patients, the average urea reduction ratio increased from 63 percent in 1993 to 68 percent in 1997 (HCFA 1994, HCFA 1998b). Despite these improvements, however, inadequate dialysis persists in over 30 percent of hemodialysis patients, suggesting the need for continued improvement in the delivered dose of dialysis. Specifically, 18 percent of patients had a urea reduction ratio of 60 to 64 percent, and 15 percent had a urea reduction ratio less than 60 percent (HCFA 1997).

The following discussion focuses on hemodialysis (because nearly 85 percent of all dialysis patients undergo this procedure) and examines potential changes to the composite rate that might increase dialysis dose.

Adjusting the composite rate based on the duration and frequency of dialysis treatment

As stated previously, duration of dialysis is an important element affecting adequacy (Held et al. 1991, Laird et al. 1983). Several studies have shown that mortality in patients treated with hemodialysis is partly influenced by the length of hemodialysis sessions. For example, results from a retrospective analysis suggest an increase in mortality among patients whose thrice-weekly hemodialysis treatments were shorter than 3.5 hours each (Held et al. 1991). Lowrie and Lew analyzed data on a sample of more than 12,000 patients and found that shorter treatment times were associated with higher mortality (Lowrie et al. 1990). Improved outcomes also have been reported in hemodialysis patients receiving extremely long (such as eight hours three times a week) or more frequent treatments (five to seven times per week) (Charra et al. 1996, Kjellstrand et al. 1998a, Kjellstrand et al. 1998b).

The length of hemodialysis treatment ranges from 3 to 4 hours per session. Overall, in the past 20 years, the length of dialysis sessions in the United States has decreased because of a number of factors, including the development of such new technologies as high-efficiency polymer membranes, which permit more rapid dialysis treatments; patient compliance; and the reduction in real dialysis payments (Held et al. 1990, Pastan et al. 1998). On the other hand, based on the evidence that shorter dialysis sessions may result in greater mortality, the length of dialysis treatments appears to be slowly increasing, from an average of 3.3 hours per session in 1993 to 3.5 hours per session in 1996 (HCFA 1994, HCFA 1999a).

Under Medicare, dialysis facilities are paid a composite rate, a prospective fixed amount for each dialysis treatment they provide. This rate does not vary

according to patient characteristics or the content of the service provided, including the length of dialysis. In general, providers may bill Medicare for no more than three dialysis sessions per week. As set forth in 42 CFR 413.182 through 413.192, HCFA may approve exceptions to a facility's dialysis payment rate using the following criteria: atypical service intensity (patient mix), isolated essential facilities, extraordinary circumstances (such as earthquakes, floods or other natural disasters), self-dialysis training costs, or frequency of dialysis (for fewer than three treatments per week). No extra payment is made for longer or more frequent dialysis treatments that might be required in certain patients.

This reimbursement policy differs from the methods used to pay for physician and inpatient hospital care. For example, payment for physician evaluation and management services is based on seven components designed to account for a number of factors, including the length of the visit, the complexity of medical decisionmaking required, the risk of complications, and the number of diagnoses or management options. In the inpatient hospital prospective payment system, reimbursement is based on diagnosis related groups, which account for how the presence of substantial complications or comorbidities affects the consumption of hospital resources and the presence or absence of many surgical procedures.

RECOMMENDATION 8A

The Secretary should determine clinical criteria for dialysis patients to receive increased frequency or duration of dialysis. The Secretary should then examine the feasibility of a multitiered composite rate that would allow different payments based on the frequency and duration of dialysis prescribed, as well as other factors related to adequacy of dialysis.

A multitiered composite rate would pay dialysis facilities more for providing longer or more frequent dialysis sessions. An important advantage of this system is that increases in dialysis payments would be specifically allocated to extend dialysis treatment times. Clearly, a multitiered composite rate would be more complex to implement than the existing single rate. Medicare would need to develop clinical criteria for determining which patients would qualify for additional payment for longer or more frequent dialysis sessions. Medicare already collects one measure of dialysis adequacy, the urea reduction ratio, and the program would need to determine what other types of clinical information would need to be collected. These clinical criteria should be developed in collaboration with renal organizations.

Several studies have concluded that higher payments may be needed to increase the length of dialysis sessions. Hirth and colleagues concluded that for the average facility, increasing treatment duration by 10 percent would increase costs by 2.7 percent and that longer dialysis treatments may be the most economical method of increasing the adequacy of dialysis (Hirth et al. 1999). In an earlier study, Held and colleagues examined the effect of the 1983 composite rate reduction on hemodialysis treatment times (Held et al. 1990)¹. After the payment reductions in 1983, average treatment times decreased by 6 percent, to 4.7 hours from 5.0 hours, in freestanding facilities and decreased by 8 percent, to 4.7 hours from 5.1 hours, in hospital units.

Increasing the composite rate
Would dialysis adequacy change by simply increasing the composite rate?
In a recent survey, researchers at the Johns Hopkins University posed a series of hypothetical reimbursement scenarios to a nationally representative

¹ Payment for outpatient dialysis was capped at a uniform flat rate of \$138 per treatment from 1973 to 1983. In 1983, Medicare enacted a series of policy changes, including reducing the composite rate to an average of \$129. This policy change resulted in reductions of approximately 9 percent in the approved charge per dialysis treatment for freestanding facilities and 11 percent in the approved charge for hospital units.

RECOMMENDATION 8B

MedPAC reiterates its recommendation made in its March 1998 and March 1999 reports calling for an increase in the composite rate.

The Commission believes that any increase in the composite rate should be used to improve the quality of care for patients with ESRD.

Anemia

Among ESRD patients, anemia primarily results from a relative or absolute deficiency of erythropoietin production by the kidneys, develops early in the course of renal failure, becomes prominent as the disease progresses, and contributes to morbidity. Before the availability of recombinant human erythropoietin (rHuEPO or Epoetin alfa), which stimulates the production of red blood cells and treats anemia associated with ESRD, the mainstays of anemia therapy in ESRD were blood transfusions and androgen injections. A recombinant version of the human protein, rHuEPO has improved quality of life and various physiological functions, including cognitive function and exercise tolerance. Since its introduction, rHuEPO has diffused relatively quickly among dialysis patients—84 percent of patients incident to hemodialysis received rHuEPO in 1996 (USRDS 1998).

As part of its Dialysis Outcomes Quality Initiative (DOQI), the National Kidney Foundation (NKF) developed clinical guidelines for managing and monitoring anemia in dialysis patients. The guidelines include information about a number of management issues, including when an anemia work-up should be conducted, administration of rHuEPO, and administration of supplemental iron. The NKF also recommends a target hematocrit range of 33 percent to 36 percent and notes that a hematocrit greater than 30 percent has been associated with increased survival and improved quality of life (NKF 1997).²

sample of facility administrators (Thamer 1999). Asked how they would respond if the composite rate increased by 20 percent, respondents indicated they most likely would: 1) increase patient education, 2) increase capital investment, and 3) increase staffing. “Changing dosing of dialysis,” one of the available answers permitted in this survey, was not among the most frequently reported responses. Significantly, however, this survey did not include nephrologists, who direct dialysis-related care, including prescribing the dialysis dose.

Patient education, staffing, and capital investments are clearly linked to the adequacy of dialysis. Patient education programs increase patients’ understanding of ESRD, their acceptance of the nature of their disease, and their ability to make choices about treatment—including their compliance with the prescribed dialysis regimen. Dialysis patients have reported that education is vital to them at all stages of their treatment by giving them the tools they need to take active and effective roles in their treatments (IOM 1991). Patients ranked information about the details of daily care, nutrition and diet, different treatment modalities, finances and insurance, and family issues as very important.

Researchers have reported a relationship between reduced dialysis payments and facility staffing, including the substitution of technicians for registered nurses and the decreased availability of social workers and dietitians (Held et al. 1990, IOM 1991). Registered nurses, social workers, and dietitians each play a valuable role in the management of dialysis patients. In one study, for example, dialysis patients indicated that the availability of and the information provided by these providers were very important aspects of their care (Rubin et al. 1997). Changes in the number and composition of dialysis staffs do not by themselves indicate that patient outcomes

have been adversely affected. Additional research is needed to understand the effect of these staffing changes on quality of care.

Compliance is a critical issue in managing the care of dialysis patients. The time required for adequate dialysis disrupts the day-to-day activities of patients. Younger patients and patients new to dialysis are more likely to skip sessions or terminate treatments early, resulting in inadequate dialysis. In an international evaluation of hemodialysis patient compliance, United States patients were more likely not to comply than patients in Japan and Sweden. In four facilities, U.S. patients missed 2.3 percent of prescribed treatments (Bleyer et al. 1999). Even an occasionally missed dialysis treatment places patients at a much higher risk for serious renal complications, including volume overload and hyperkalemia. Ultimately, additional patient education and more staffing may increase compliance with the prescribed treatment regimen, thereby improving the adequacy of dialysis.

Capital investment also is linked to the adequacy of dialysis. The Commission’s review of new and emerging technologies suggests continuing improvements in numerous technologies important in the dialysis process, including synthetic and modified cellulose membranes and urea monitoring, kinetic modeling, and water purification systems (MedPAC 1999). Upgrading to these quality-enhancing technologies is expensive, however, which may affect their rate of diffusion. For example, use of synthetic and modified cellulose dialysis membranes is associated with a reduced risk of death, compared to cellulose membranes, but they are also more expensive (Hakim et al. 1996). These newer membranes have diffused gradually, from 33 percent in 1990 to 55 percent in 1993 and 79 percent in 1996/1997 among incident hemodialysis patients (USRDS 1999). Use of these membranes also widely varies by geographic region.

2 Hematocrit is the fraction of total blood volume made up of red blood cells

Average hematocrit levels of dialysis patients have increased in this decade, from 30.5 percent in 1993 to 33.2 percent in 1997 (HCFA 1998). However, despite the wide diffusion of rHuEPO and the dissemination of the DOQI guidelines on anemia management and monitoring to providers, nearly 30 percent of hemodialysis patients had hematocrit levels lower than 30 percent in 1997 (HCFA 1998). Other factors contributing to anemia include inadequate dialysis dose, iron deficiency, infection and inflammation, occult gastrointestinal blood loss, hyperparathyroidism, vitamin deficiency, hemolysis, and bone marrow disease (Ifudu et al. 1996).

Medicare's policies also have influenced the management of anemia in dialysis patients. From 1989 to 1991, Medicare's fixed payment policy resulted in lower prescribed doses of rHuEPO than suggested by the labeling approved by the Food and Drug Administration, which recommends a starting dose of 3,400 to 6,800 units per treatment (assuming an average patient weight of 68 kilograms). By contrast, in 1990, the average dose ranged from 2,500 to 2,800 units per treatment (Collins et al. 1998).

Consequently, Congress changed payment from a flat rate per dose to a unit-dependent rate of \$11 per 1,000 units in 1991. For patients initiating use of rHuEPO, HCFA reimbursed its use only for patients with hematocrit levels up to 30 percent (unless medical justification showed the need for rHuEPO, despite levels greater than 30 percent). For patients already using rHuEPO, HCFA reimbursed its use for patients with hematocrit levels no higher than 36 percent. Medical providers could submit statements of medical justification for rHuEPO use exceeding these standards. These policy changes increased rHuEPO dosage levels, from 2,700 units in 1990 to 3,800–4,000 units in 1993 for patients with hematocrit levels less than 30 percent (Collins et al. 1998). In 1993, based on a

recommendation from the Office of Inspector General, the rHuEPO payment rate was reduced to \$10 per 1,000 units. This change did not result in a noticeable change in rHuEPO dosing patterns.

In July 1997, HCFA implemented the Hematocrit Measurement Audit policy, directed at increasing the stability of hematocrit levels. Under this policy, the agency did not allow payment for rHuEPO for patients with hematocrit levels exceeding 36.5 percent, based on a three-month rolling average. This policy specifically required intermediaries to identify patients with hematocrit levels (reported on rHuEPO claims) exceeding 36 percent and calculate their average levels in the prior 90 days. If this average level exceeded 36.5 percent, the fiscal intermediary denied payment for rHuEPO. The new policy also eliminated medical justification for patients with hematocrits greater than 36 percent.

Many experts in the renal community believe this policy led to a reduction in average hematocrit levels (Collins et al. 1998, Nissenson et al. 1999). In July 1998, HCFA revised this policy by increasing the threshold hematocrit level to 37.5 percent, conducting post-payment review, and reinstating the policy of appeals based on medical justification. Further follow-up will be needed to determine the impact of this policy change on reimbursement for rHuEPO and patient outcomes.

Nutrition

Malnutrition is a frequent complication of ESRD and is a significant cause of morbidity and mortality in dialysis patients. It factors into a decreased response to dialysis therapy, more frequent hospitalization, less successful recovery from surgery, trauma, infection, and an increased risk of mortality. Surveys of the nutritional status of maintenance dialysis patients indicate that from 18 percent to 56 percent of patients suffer from protein-energy malnutrition,

with about 33 percent of patients having clinically recognizable mild-to-moderate malnutrition and 6 percent having severe malnutrition.

Serum albumin level is a clinical marker frequently used to assess the nutritional status of patients. Albumin levels lower than 3.5 gm/dL (based on the bromocresol green laboratory method) are associated with increased mortality compared with higher levels of serum albumin. According to HCFA, about 20 percent of hemodialysis patients had serum albumin levels less than 3.5 gm/dL in 1997. Unlike the improvements HCFA reported from 1993 to 1997 in dialysis patients' adequacy and anemia status, serum albumin levels have shown no clinically important changes in this same time period (HCFA 1998b).

Available medical interventions to prevent or treat malnutrition in dialysis patients include:

- intradialytic parenteral nutrition (IDPN) for hemodialysis patients,³
- intermittent parenteral nutrition (IPN) for peritoneal dialysis patients,
- oral nutritional supplements,
- enteral tube nutrition, and
- total parenteral nutrition.

Medicare's coverage policy severely limits the number of ESRD patients who qualify for these treatments, for the reasons below (Knerer et al 1991, McCann 1994). Because of the prevalence of malnutrition in ESRD patients, Medicare should cover nutrition therapy for patients with ESRD.

RECOMMENDATION 8C

The Secretary should determine clinical criteria for ESRD patients to be eligible for oral, **enteral**, or parenteral nutritional supplements. Coverage for these supplements should then be provided to eligible ESRD patients as a renal benefit apart **from** the composite rate.

3 Introdialytic parenteral and intermittent parenteral nutrition treats malnutrition during dialysis by adding amino acids to the hemodialysate or peritoneal dialysate, respectively, providing an intermittent source of protein.

Many renal providers believe that IDPN and IPN have distinct clinical advantages for managing malnutrition compared with the alternative nutritional interventions.⁴ Several observational studies suggest improved outcomes associated with IDPN use (Capelli et al. 1994, Chertow et al. 1994, Foulks 1994), but Medicare's policy limits the number of dialysis patients who qualify for these interventions because IDPN and IPN are classified as prosthetic devices, with coverage limited to patients with a nonfunctioning gastrointestinal tract.⁵ In dialysis patients, in contrast, the primary barrier to adequate nutrition is inadequate intake of protein and calories (Kopple 1999).

Medicare's coverage policies also limit the use of enteral tube feeding. As with IDPN and IPN, enteral tube feeding is classified as a prosthetic device and therefore restricted to patients with a nonfunctioning gastrointestinal tract.⁶ A statutory change will be necessary for coverage of enteral tube and parenteral nutrition because the Social Security Act specifically defines prosthetic devices as devices that replace all or part of an internal body organ. Because Medicare does not pay for oral nutritional supplements at all, a statutory change also would be required to provide coverage.

Inpatient hospitalization

Hospitalization rates may reflect the quality of dialysis care because patient morbidity significantly affects the frequency and duration of hospital care. Medicare coverage and payment policy also may affect rates of hospital admission. The relevant questions are:

- Whether the level of payment influences the level of resources available for dialysis.
- Whether less adequate treatment leads to increased morbidity, as indicated by higher rates of hospitalization and longer stays.

The IOM's 1991 report compared two prevalent patient groups for 1982 and 1984 and suggests a relationship between changes in the rate of dialysis payment and hospitalization and mortality (see mortality results in the next section).⁷ Using a price-level model, researchers estimated that a decrease of \$10 in the standardized price of dialysis leads to a 2 percent to 4 percent increase in hospitalization. However, a first-difference model does not detect a correlation between price change and hospital use (IOM 1991).

Overall, the mean number of hospital admissions for dialysis patients remained stable from 1993 through 1996, ranging from 1.45 to 1.49 per calendar year per dialysis patient (USRDS 1998). Mean hospital days have fallen about 11 percent over the same period. In 1996, about 25 percent of dialysis patients were hospitalized once, and 35 percent were hospitalized more than once.

In addition to chronic renal failure, the leading reasons for hospital admission are in Table 8-1. Patients frequently are hospitalized for complications of dialysis such as electrolyte disorders, vascular access problems, and anemia, and for underlying causes or comorbid conditions associated with ESRD, such as diabetes, congestive heart failure, and hypertension (Thamer et al. 1996).

As expected, renal failure patients are more likely to be hospitalized for

complications of dialysis compared with patients with other chronic, progressive diseases. For example, these patients are at five to nine times the risk of being hospitalized for anemia and electrolyte disorders, compared to patients with ischemic heart disease or diabetes. Despite the impressive technical advances in dialysis, such as improvements in dialysis machines, water purification systems, and the composition of dialysate, inpatient hospitalization remains high among dialysis patients.

Mortality

Despite an aging population that includes a greater proportion of persons with diabetes, survival of dialysis patients has improved steadily in the 1990s. The adjusted annual death rate for dialysis patients fell to 22 deaths per 100 patient-years in 1996 from 26 deaths per 100 patient-years in 1989. The adjusted five-year rate for survival patients has improved to 29 percent in 1991 from 24 percent in 1981 (USRDS 1998).

Cardiovascular disease accounts for about 50 percent of all deaths in dialysis patients, while infections account for 15 percent of deaths. Nearly one in five patients withdraws from treatment before death, with many more older patients withdrawing than younger patients (USRDS 1998).

Many clinical factors contribute to mortality in kidney failure patients, including inadequate dialysis, suboptimal quality control in dialysis delivery, inadequate nutrition, and the presence of selected comorbidities. For example, patients with diabetes have significantly poorer survival than patients with hypertension, glomerulonephritis, and polycystic kidney disease (Byrne et al. 1994).

4 Reported clinical advantages of these treatments include: (1) a central venous line (used in total parenteral nutrition) is not needed, (2) the removal of excess water and mineral intake during dialysis, and (3) a high protein-to-calorie ratio corrects a disproportionate deficit in the intake of dietary protein.

5 Daily parenteral nutrition is limited to patients "with severe pathology of the alimentary tract which does not allow absorption of sufficient nutrients to maintain weight and strength commensurate with the patient's general condition" (HCFA 1999b).

6 Enteral tube nutrition is limited to patients with a "nonfunctioning gastrointestinal tract who, due to pathology to or nonfunction of the structures that normally permit food to reach the digestive tract, cannot maintain weight and strength commensurate with his or her general condition" (HCFA 1999b).

7 The IOM developed two models. The price-level model analyzes whether hospitalization and mortality rates associate with variations in price levels among facilities at a given time. This model analyzes whether rates are higher at facilities receiving lower standardized payments during a specific year. The first-difference model uses each facility as its own control by comparing rates in each facility at two different times. This model analyzes whether the rate at a facility changed when the payment it received changed.

**TABLE
8-1**

Reasons for hospitalization of patients with renal failure, 1991

Reason for hospitalization	Rate of hospitalization (per year per 10,000 patients with renal failure)	Relative risk of hospitalization compared to patients with ischemic heart disease	Relative risk of hospitalization compared to patients with diabetes
Vascular access problems	1055.6	81.6*	28.7*
Congestive heart failure	943.2	8.9*	6.7*
Diabetes	348.9	10.6*	1.0
Pneumonia and influenza	331.6	4.8*	2.9
Electrolyte disorders	286.9	10.6*	5.1*
Myocardial infarction	276.9	1.1	2.5
Ischemic heart disease	269.5	0.5	1.5
Cerebrovascular disease	179.9	3.2*	1.6
Pulmonary edema and respiratory failure	173.8	12.4*	6.2*
Sepsis and septicemia	173.3	13.1*	3.9*
Gastrointestinal hemorrhage	162.4	15.8*	10.5*
Hypertension	154.6	5.1*	2.7
Conductive disorders	132.8	2.0	2.2
Urinary tract infection	102.6	9.0*	2.6
Anemia	92.2	8.9*	5.0*

Note: These rates are based on the first-listed diagnosis on hospital discharge forms for patients in the third (chronic renal failure) and fourth (ESRD) stages of chronic renal disease. They are adjusted for age by the indirect method to reflect the distribution of the US population in 1991.

*Statistically significant at $p < 0.05$.

Source: Thamer M, Ray NF, Fehrenbach SN, et al. Relative risk and economic consequences of inpatient care among patients with renal failure. *Journal of the American Society of Nephrology*. May 1996, Vol. 7, No. 5, p. 751-762.

The IOM's 1991 report compared two prevalent patient groups for 1982 and 1984 and found a suggestive relationship between changes in the dialysis payment rate and mortality (IOM 1991). Using a price-level model, researchers found that higher standardized dialysis payments related to lower mortality rates. However, using a first-difference model, they did not detect a correlation between price change and mortality rates.

Many studies indicate that mortality rates among ESRD patients in the United States are 20 percent to 50 percent higher than in other countries (Friedman 1996). In general, it is difficult to determine whether this difference is a statistical artifact or whether it reflects real differences in the quality of patient care. Several factors may explain cross-

national differences including: differences in population characteristics, access to care, medical practice patterns, data reporting, and information systems. The United States has the highest rate of treated ESRD patients per million population, and it treats patients who are older and sicker and have more coexisting conditions than patients in other countries. Practice patterns—including treatment modality, dose of dialysis, use of reprocessed dialyzers, and types of dialyzer membrane used—also differ between the United States and other countries. The kidney transplantation rate is higher in the United States than other countries, such as Japan, where relatively young, healthy patients do not receive transplants and instead remain on dialysis. Finally, cross-national differences in mortality rates

result from differences in the consistency of data reporting and the types of information systems for maintaining the collected data. During the past two decades, the United States has developed extensive databases of information on ESRD patients' demographic and clinical characteristics, courses of care, and outcomes. Conversely, researchers have noted a consistent underreporting of deaths from renal failure in many European countries (Friedman 1996).

Although population characteristics and different protocols for treating patients explain some of the observed differences in ESRD mortality rates, several studies controlling for treatment modality and important demographic covariates have concluded that mortality rates still appear to be higher in the United States than in other countries (Homburger et al. 1997, Marcelli et al. 1996). Other studies also suggest that the hemodialysis dose prescribed and delivered in the United States is lower than recommended and lower than those in other countries (Delmez et al. 1992, Gotch et al. 1990, Held et al. 1994, Sargent 1990).

A large, current observational study, the Dialysis Outcomes and Practice Patterns Study, examines differences in dialysis practice patterns and outcomes in the United States, five European countries (France, Germany, Italy, Spain, and the United Kingdom), and Japan and may explain these observed mortality differences. This study also will examine how specific clinical practice patterns affect other outcomes, including rates of hospital admission, vascular access, and quality of life. Researchers are collecting data for 4,800 patients in the United States, 3,000 patients in Europe, and 1,800 patients in Japan.

Quality assurance and assessment projects

During the past two decades, public and private organizations have conducted numerous projects to monitor and analyze the quality of ESRD care. In 1978, Congress established the ESRD networks to provide regional oversight for

Medicare-approved dialysis and transplantation facilities. The 18 current networks are funded by withholding 50 cents per treatment from the payment to dialysis facilities. The National Forum of ESRD Networks facilitates the exchange of information among the 18 regional networks, the renal providers, and HCFA, and promotes improved quality of care through education and the collection, analysis, and dissemination of data.

HCFA sponsors many efforts, described in Table 8-2, to monitor and assess the quality of ESRD care.

In response to the BBA requirement to develop a method to measure and report the quality of renal dialysis services under Medicare, HCFA has developed clinical performance measures based on the NKF DOQI guidelines. They include five hemodialysis adequacy measures, three peritoneal dialysis measures, four vascular access measures, and four anemia management measures. HCFA uses these clinical performance measures for population-based quality improvement rather than as tools to evaluate the care of specific patients or as standards for quality assurance. The agency is collecting data to measure clinical performance for a nationally representative sample of adult dialysis patients and is considering the feasibility of disseminating facility-specific data for several of these clinical performance measures.

MedPAC supports the past and current efforts by HCFA and the USRDS to measure and monitor the quality of dialysis care. Their continued collection, analysis, and dissemination of quality indicators help the renal community to closely monitor patient care and outcomes. Collecting clinical performance measures should assist in future efforts to analyze the quality of dialysis care.

Private efforts by several renal organizations also have enhanced the quality of ESRD care. The nephrology community has developed several clinical practice guidelines to assist clinicians who care for ESRD patients. RPA published the

**TABLE
8-2**

Current renal quality initiatives sponsored by HCFA

Quality initiative	Goal of program
End-Stage Renal Disease Health Care Quality Improvement Program	To improve the health of Medicare beneficiaries. Since 1994, HCFA has monitored quality in its ESRD Core Indicators Project, which collects clinical information annually on four key indicators [adequacy of dialysis, hematocrit value, nutritional status, and blood pressure control] on a national sample of adult in-center hemodialysis and peritoneal dialysis patients.
Clinical performance measures project	To develop clinical performance measures, which essentially will replace the quality indicators used in HCFA's ESRD Core Indicators Project. The project also will measure and report on the quality of Medicare's renal dialysis services, as the BBA required.
Demonstration project on ESRD capitated care	Required by the Omnibus Budget Reconciliation Act of 1993 to determine if high-quality ESRD care can be delivered in a globally capitated payment system. Demonstration sites include Southern California (Kaiser Permanente), Nashville [Phoenix Healthcare], and Southern Florida (Health Options).
Standard Information Management System Project	To permit electronic transfer of standardized information from dialysis facilities to the ESRD networks and HCFA.
United States Renal Data System	Operated by the National Institute of Diabetes and Digestive and Kidney Diseases with HCFA. The system collects, analyzes, and distributes information on the incidence and prevalence of treated ESRD, modality of treatment, causes of death, patient survival, and hospitalization in its annual reports and special studies.

Source: Data compiled by MedPAC, 1999

first guideline on adequacy of hemodialysis in 1993 (RPA 1996). The NKF DOQI then developed four practice guidelines on adequacy of hemodialysis, adequacy of peritoneal dialysis, vascular access management, and anemia treatment, and is developing a fifth guideline on nutrition, expected to be published later this year. Numerous renal organizations, including the NKF, RPA, and the American Association of Kidney Patients, educate patients and providers about ESRD.

RECOMMENDATION 8D

In fulfilling the requirements of the BBA regarding improving the quality of dialysis care, the Secretary should take into consideration the quality assessment and assurance efforts of renal organizations.

**MedPAC's research
workplan**

As required under its mandate, the Commission will continue to address ESRD payment and quality issues in the coming year.

**How Medicare's payment
policies affect quality of care**

MedPAC will continue its research efforts to explore the relationship between payment methods and levels and quality of care. In 1998, HCFA began requiring providers of hemodialysis to report the urea reduction ratio monthly for every patient. These data may permit retrospective analyses of the association between dialysis adequacy and the use of health care services, including the risk,

rates, and causes of hospital admission. Another important issue relates to the effect of Medicare's policies on the diffusion of certain dialysis modalities. For example, patients on daily home hemodialysis have improved their quality of life. Medicare's reimbursement policy poses a barrier to its diffusion, however, because it caps payment for most patients at an amount equal to the cost of providing three hemodialysis sessions per week.

How Medicare payment policies affect innovation

Little is known about the effect of Medicare payment policies on innovation and technological change. Numerous innovations in membranes, dialysate, and other dialysis-related technologies occurred from the mid-1960s to the early 1980s, partly sponsored by the NIH Artificial Kidney and Chronic Uremia program. In its 1991 report on quality of renal care, the IOM suggested that unchanged dialysis payments, which

initially encouraged providers to adopt cost-reducing and more efficient technologies, appear to restrict further technical improvements (IOM 1991). Previous Commission analyses suggest that the substantial innovation in hemodialysis and peritoneal dialysis care in the 1980s and first half of the 1990s, such as the development of high flux dialyzers and synthetic hemodialysis membranes, has slowed in the late 1990s (MedPAC 1999). More research should study the effect of payment on innovation and technological improvement. ■

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A P P E N D I X

A

**Two models for structuring
informed beneficiary choice**



Two models for structuring informed beneficiary choice

The medigap and food labeling examples exhibit two different approaches to increase comparison shopping for consumers and to promote value-based competition. Standardizing benefits increases comparability but restricts the number of choices available to the consumer. Standardizing descriptive information about products and options also increases comparability without limiting product variance. Both approaches may facilitate decisionmaking, but the latter is less invasive, places fewer restrictions on the market, and allows producers to innovate and create better-value products.

The medigap example

The Omnibus Reconciliation Act (OBRA) of 1990 standardized health care policies available to beneficiaries in the Medicare supplemental insurance market. The elderly buy Medicare supplemental insurance or "medigap" policies to fill coverage gaps in traditional fee-for-service Medicare. Medicare beneficiaries faced a vast and confusing array of supplemental insurance options before standardization measures. By standardizing benefits packages into 10 different policies, legislators hoped to give consumers more leverage in choosing

their medigap policies. Beneficiaries would be able to make informed decisions by comparing information about standardized benefits instead of sifting through information about an array of available benefit packages.

Need for intervention in the medigap market: historic context

The prestandardization supplemental insurance market was criticized for several reasons, including the prevalence of beneficiary confusion, fraudulent and abusive marketing and financial practices, and inefficiencies in the market.

Beneficiary confusion: Beneficiaries were confused by the different combinations of available benefits packages and premiums.

Beneficiaries' minimal knowledge of Medicare compounded the problem. According to McCall and colleagues, fewer than half of beneficiaries surveyed in 1982 understood that Medicare does not cover hospital stays exceeding 30 days or that it covers all cost, after the deductible is met, for a five-day hospital stay (McCall et al. 1986). As for the medigap market, few had a good grasp of the limitations in maximum coverage and other important characteristics of their policies.

- **Fraud and abuse:** Certain insurance companies were heavily marketing their medigap policies-sometimes to the point of misrepresenting their products-to convince the elderly to switch policies or to buy multiple policies. Some companies retained excessive profits by maintaining low loss ratios (the ratios of policy payments to premiums).
- **Market inefficiencies:** Several benefits packages offered specific benefits that might have appeared attractive but held no real value relative to costs. For example, certain policies covered payment for skilled nursing facilities (SNFs) beyond 100 days if Medicare had continued coverage until then. But because Medicare usually stopped SNF payments well before 100 days, this benefit offered little value. Because comparisons were difficult, ill-informed beneficiaries sometimes bought duplicative and unnecessary coverage.

In 1980, the medigap insurance market became the subject of several congressional hearings. Major problems with the market were highlighted by news of fraudulent market practices to lure frail elderly into switching policies or purchasing duplicative coverage.

These hearings led to the passage of the so-called Baucus Amendments, which encouraged state governments to establish minimum standards for medigap policy carriers. These standards, set by the National Association of Insurance Commissioners (NAIC) and the Association of Chief State Insurance Commissioners, required insurers to offer certain minimum benefits, maintain above-the-floor loss ratios, disclose a wide range of information to state officials, and provide accurate consumer guides. According to the General Accounting Office (GAO), the Baucus Amendments met most of their objectives in reducing marketing fraud and providing minimum benefits, but the legislation did not help consumers shop effectively for medigap policies (1986). These problems persisted because the Baucus Amendments did not address the wide array of benefit and premium combinations available, nor was information on the assortment of policies couched in user-friendly, comparative formats. Also, the Baucus Amendments were not successful in inducing insurers to make minimum benefits payments in relation to premiums (minimum loss ratios) (Fox et al. 1995).

OBRA 1990 moved the medigap private insurance market, which traditionally had been under state jurisdiction, to federal control. The legislation also contained certain key provisions to alter the way medigap policies were sold and purchased after July 1992:

- All supplemental insurance policies, including hospital indemnity and dread disease policies, were standardized into 10 prototypes, named A-J.
- In addition to disclosing earnings and related information, which continued to be required, insurers now were required to provide potential policyholders with accurate information on benefits and premiums.
- Loss-ratio floors were set at 65 percent for individual policies and 75

percent for group policies. Insurers were required to distribute refunds to policyholders if ratios fell below the floors.

Agents' commissions for policy sales were limited, and agents and insurers who knowingly sold duplicative coverage could face penalties.

Exclusion periods for pre-existing conditions were limited to minimize adverse selection. Insurers were also required to hold six-month open enrollment periods for new Medicare Part B enrollees.

Has medigap standardization met its objective of facilitating beneficiary choice?

Standardizing medigap has helped improve beneficiary decisionmaking by simplifying options and reducing confusion among the elderly.

Simplified market

Before standardization, beneficiaries faced two general options:

- They could choose one or more supplemental policies that filled specific gaps in Medicare coverage. Because beneficiaries did not receive a list of supplemental insurance options or managed care organizations in their service area, they had difficulty learning about available options. Newly eligible beneficiaries had the dual task of learning how to navigate the Medicare environment and the supplemental market.
- They could leave the traditional fee-for-service setting and enroll in a managed care organization. If beneficiaries chose to leave the fee-for-service environment, they had to forgo access to medigap policies (otherwise, many would have duplicative coverage) (Davidson 1988).

Standardization simplified the decision-making process for supplemental policies.

Although standardizing supplemental policy options into 10 medigap packages limited the number of choices available to consumers, it also significantly reduced the number of variables to process. Standardization narrowed the scope and amount of information needed for effective side-by-side comparison (Rice 1997). However, they did not simplify the choice between fee-for-service or managed care settings. Education initiatives about Medicare+Choice could help make this decision easier for beneficiaries.

Reduced beneficiary confusion

A survey of representatives from insurance carriers; consumer advocacy groups; state and federal officials; and state information, counseling, and assistance programs in 1992, 1993, and 1995 found that confusion among policyholders diminished as a result of medigap policy standardization (McCormack et al. 1996). Consumer advocates say that beneficiaries have become accustomed to 10 types of supplemental benefits packages. Researchers found that the number of complaints to state insurance departments decreased after standardization. OBRA regulation of marketing practices might explain some of this downward trend since agents; commission limits create disincentives for overly aggressive marketing (McCormack et al. 1996).

Has **OBRA** 1990 met its objective to enhance competition among medigap policy carriers?

The legislated standardization measures, coupled with regulations, cut down on fraudulent business practices. They also achieved a level of market stability and helped beneficiaries obtain better value. However, there is concern that risk selection-separation of the sicker, riskier population from the general population—has made the medigap market more expensive. Also, standardization may have prevented the medigap market from innovating to meet the varied needs of the beneficiary population.

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States need to recognize differences in the services used by the reference population and PACE enrollees. The PACE program, by definition, offers a broad range of services that are beyond the scope of traditional Medicare, Medicaid, and HCBS. Although the majority of participating states use the cost of care for the nursing facility population as a basis for rate setting, some states adjust the capitation rate to account for HCBS use, which is one step closer to the PACE model of care. In any case, differences in service use across programs can translate into unexpected differences in spending on care for the reference population and for the PACE population.

Determining risk adjusters

When determining the Medicaid payment, state agencies use the reference population as a proxy for the PACE population, assuming that care for the PACE population would have cost about the same as care for the reference population. This justification is predicated on the assumption that the reference population and the PACE population are fundamentally the same in terms of their demographic and risk profiles; however, PACE sites may encounter advantageous

or adverse selection from the pool of eligibles compared with the reference group.

To reduce the probability of incorrectly estimating the cost of PACE to Medicaid, states can adjust the capitation rate to reflect differences between enrollees and the comparison group used for rate setting or to reflect the mix of enrollees at different sites within a state. If a state chooses to implement a risk-adjustment mechanism, Medicaid agencies must identify available risk adjusters, evaluate their success at predicting the cost of caring for the PACE population, and decide how often the chosen risk adjuster should be updated (see Chapter 5).

Future research

Critical questions about payment methods need to be addressed before MedPAC comments on payment amounts to PACE. The first is whether Medicaid is paying an appropriate amount for the care of the reference population. State Medicaid agencies set the capitation rate for PACE assuming that an appropriate amount is spent on care for the reference

population, but this assumption may not be correct. Even if Medicaid pays an appropriate amount, a second, related question is whether PACE enrollees and beneficiaries using NFs and HCBS have systematic differences in health characteristics, family support, income, and unobservable characteristics. Information about such differences would help states assess whether the reference population is an adequate proxy for the PACE population.

Finally, more information is needed on whether states view PACE as a substitute for NF care or as a program to offer the spectrum of care for frail Medicare and Medicaid beneficiaries. States committed to offering alternatives to NF care might prove to be more diligent than other less committed states in setting payment rates that accurately reflect the market cost of caring for frail Medicaid beneficiaries. If this is the case, unexpected differences in spending on care for the reference population and for the PACE population may reflect the state's commitment to the program, rather than inaccurate payment methods. ■

qualified to receive capitation payments from Medicaid but not Medicare. Currently, half of these "pre-PACE" sites receive a blended rate that reflects the costs of care for the NF and HCBS populations. Pre-PACE sites operate under Medicaid prepaid health plan (PHP) authority, and Medicare pays for covered services on a fee-for-service basis. Under this PHP authority, states can capitate providers on a limited risk basis. Specifically, states may not contract with a pre-PACE provider for more than two Medicaid mandated benefits. Most states capitate nursing facility care and all or some physician services (On Lok 1998).

Medicare beneficiaries can choose whether to receive Medicare-covered services from the pre-PACE site or from other providers. The goal of pre-PACE plans is to move toward the full PACE system by providing long-term care and primary care services under a capitation payment. With this payment method, plans have the advantage of operating under the PACE model of care before assuming financial responsibility for all services (On Lok 1998). Because PACE has become a permanent program under Medicare, newly emerging PACE sites also have the option of immediately receiving capitation payments from both Medicare and Medicaid, thus eliminating the pre-PACE financial arrangement.

Issues in setting rates

Among the issues that must be addressed in determining the capitation rate are selecting a comparison group, identifying the services the payment is expected to cover, and determining the need for risk adjusters.

Selecting a comparison group

The starting point for setting a capitation rate is identifying a population comparable to the PACE population. PACE serves frail Medicaid or Medicare beneficiaries who are at least age 55 and meet the states' criteria for nursing facility level of care. Therefore, the comparison group also should meet these criteria.

An obvious comparison group is the NF population. Many states use this population as the reference group; some also compare the PACE population with people who use HCBS. Like PACE, the purpose of HCBS is to prevent or postpone NF placement. Unlike PACE, which continues to enroll individuals when they are institutionalized, HCBS programs require participants to exit the programs when they need NF placement. As a result, if a community population is used as a comparison group, that population must be tracked across settings to generate an estimate of the cost to Medicaid of care for the comparison group.

State Medicaid agencies and PACE sites should question the extent to which people who are eligible for PACE are at risk of entering a NF. It may be the case that in the absence of PACE—those who would have enrolled in the program may choose an alternative form of care not represented by the reference group(s) selected. In one study that compared PACE participants with a sample of individuals in the 1985 National Nursing Home Survey, PACE participants were less dependent in activities of daily living than people in nursing homes (On Lok 1993). Wiener and Skaggs (1995) have proposed that the differences found in this study may reflect systematic differences between PACE participants and nursing home residents, such as the two groups' motivation or ability to continue living in the community. Hence,

the assumption that 100 percent of PACE enrollees otherwise would have entered a nursing facility might be inappropriate.

Identifying covered services

The second issue that states must address in determining a capitation rate is identifying which services the payment is expected to cover. There are distinct differences and some overlap in the benefits that NFs, HCBS, and PACE offer. PACE sites also offer a broad range of services beyond the scope of traditional Medicare, Medicaid, and HCBS. The program is able to do this by substituting nontraditional services for traditional services, based on enrollee needs. Nontraditional services may include, but are not limited to, meals, respite care, case management, companion services, nutritional counseling, extended personal care, transportation, and escort services (Eng et al. 1997).²

Nursing facilities provide skilled nursing care, rehabilitation services, and health-related care and services to individuals who, because of their mental or physical condition, require care and services available only at institutional facilities (Congressional Research Service 1993). HCBS programs offer a wide variety of nonmedical, social, and supportive services. Services that states may cover in a home- and community-based program include case management, homemaker and home health aide services, personal care, adult day health care, habilitation services, respite care, and other services requested by the state and approved by the Secretary (Congressional Research Service 1993).³ Medicaid HCBS waiver programs do not cover therapies, such as physical therapy, or stays in a hospital or nursing facility, but for dually eligible beneficiaries Medicare covers inpatient hospital stays, therapies, and up to 100 days of care in a skilled nursing facility per spell of illness.

2 Transportation services include transportation between center and residence and transportation to physician appointments and other locations from either the PACE center or from enrollees' homes. In escort services, staff accompany enrollees to medical appointments or other locations to provide supervision or assistance (On Lok 1996).

3 Habilitation services are designed to help people who have mental retardation and developmental disabilities in acquiring, retaining, and improving the self-help, socialization, and adaptive skills they need to live successfully in the community.

**TABLE
B-1**

PACE Medicaid rates, cost comparisons, and methods, February 1999

continued

	PACE monthly rate	Comparison group for the PACE population	Average monthly cost to Medicaid for the PACE comparison group	PACE rate as a percentage of comparison group costs	Summary of the rate method
Oregon	\$1,812	Assisted Living (Level 5)	1,907	95	The rate is based on the state's spending for the assisted living Level 5 population. The rate is discounted by 5%.
South Carolina ^a	2,308	NF	2,429	95	The rate is based on the spending for the NF population in a comparable geographic region. The rate is discounted by 5%.
Tennessee ^b	1,989	NF	2,094	95	The rate is based on a weighted average of the NF rate, minus the average patient liability, plus the capitation rates paid for acute care and behavioral health care. The rate is discounted 5%.
Texas ^a	2,085	NF	2,195	95	The rate is based on the average NF rate by county, minus the statewide average recipient liability (resident payment), plus the average additional costs for the NF population. The rate is discounted by 5%.
Washington	3,093	NF	3,273	95	The rate is based on the average NF rate by county, plus the cost of covered services for the NF population. The rate is discounted by 5%.
Wisconsin (Milwaukee)	2,132	NF	2,244	95	The rate is based on the average NF rate by county, minus the statewide average recipient liability, plus additional costs for NF population. This rate is case-mix adjusted: NF component is based on the percentage of enrollees at the SNF versus the ICF level at the time of enrollment. The additional cost component is adjusted based on age of enrollee. The rate is discounted by 5%.

Note: NA (not available), NF (nursing facility), HCBS (home and community-based services), SNF (skilled nursing facility), ICF (intermediate care facility).

^a The state's capitation payment to PACE and the cost of Medicaid for the comparison group have been reduced by the enrollees' share of the cost.

^b The Oakland and Sacramento rates are \$2,245 and \$1,864, respectively (van Reenen 1999).

Source: National PACE Association PACE Medicaid Rates, methodologies, and cost comparisons, San Francisco, On Lok, 1999.

A few states adjust the Medicaid rate to reflect enrollee characteristics, or case mix. For example, the Wisconsin Medicaid rate is based on the average county NF rate, minus the statewide average recipient liability, plus additional cost of caring for the NF population. This rate is case-mix adjusted. The NF rate is

adjusted based on the percentage of enrollees needing different levels of care—a skilled nursing facility versus an intermediate care facility—at the time of enrollment. The additional cost component is adjusted based on the age of the enrollees. All states discount the reference rate by 5 percent to 15 percent

to reflect the anticipated savings from the PACE plan's coordination of acute and long-term care services. (See Table B-1 for a detailed summary of PACE Medicaid rates and methods).

A small group of sites are organized around the PACE model and have

**TABLE
B-1**

PACE Medicaid rates, cost comparisons, and methods, February 1999

	PACE monthly rate	Comparison group for the PACE population	Average monthly cost to Medicaid for the PACE comparison group	PACE rate as a percentage of comparison group costs	Summary of the rate method
California [San Francisco Bay Area] ^{a, b}	\$2,213	NF	\$2,604	85%	The rate is based on the state's spending for the NF population in a comparable geographic area. The payment rate is adjusted by PACE enrollees' age, sex, and Medicare status. The rate is discounted by 15%.
Colorado ⁰	1,786	NF, HCBS	1,880	95	The rate is based on the state's spending for the NF and HCBS populations in a comparable geographic area—weighted 40% NF and 60% HCBS, based on PACE enrollees' residential status. The rate is discounted by 5%.
Massachusetts	2,129	NF	2,717	78	The rate is set at 67% of the average NF rate. Historically, the rate was negotiated based on providers' costs and compared with the state's net spending for NF, HCBS, and adult foster care populations. The result was 67% of the NF rate (78% of comparison group costs).
Michigan ^a	2,182	NF	2,297	95	The rate is based on the state's spending for the NF population. Statewide rather than county-specific data are used. The rate is discounted by 5%.
New York [Bronx]	4,301	NA	NA	NA	NA
New York (Rochester)	2,796	NA	NA	NA	NA

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Medicaid payments to the Program of All-Inclusive Care for the Elderly

The Balanced Budget Act (BBA) of 1997 requires the Medicare Payment Advisory Commission (MedPAC) to comment on Medicaid payment methods and amounts for the Program of All-Inclusive Care for the Elderly (PACE). This appendix primarily focuses on payment methods. Before commenting on payment amounts, MedPAC will wait for additional information on payment methods and until the Health Care Financing Administration's study of PACE's cost effectiveness to Medicaid has been released.

This appendix begins with an overview of Medicaid capitation rates to PACE and follows with a discussion of selected issues involved in setting these rates. These issues are:

- Selecting a comparison group that accurately reflects the use of services in the local market by people eligible to enroll in PACE,
- Identifying the services used by PACE enrollees and comparing them with those used by the reference population, and
- Determining the need for risk adjusters.

Medicaid capitation: an overview

Most PACE enrollees are covered by both Medicare and Medicaid, which make capitation payments to PACE sites. Each state's Medicaid agency negotiates its portion of the capitation payment with the PACE plan. As a result, no uniform method exists for setting the Medicaid capitation rate. Nonetheless, the rate is designed to supply providers with enough resources to provide enrollees with a wide array of acute and long-term care services.

States participating in PACE base the capitation rate on an estimate of how much Medicaid would pay for PACE enrollees, under the traditional Medicaid program, in an alternative setting—typically a nursing facility (NF) or a home- and community-based program.¹ Home- and community-based services (HCBS) are provided under waiver programs authorized in section 19 15(c) and 19 15(d) of Medicaid law. The provisions allow the states to offer certain long-term care services in homes and communities to people who otherwise would require nursing home care or other institutional care financed

by Medicaid. Notwithstanding the goal of HCBS, research suggests that community-based programs serve populations that have a relatively low risk of nursing home placement (Kemper et al. 1987).

PACE Medicaid rates are intended to reflect spending on services for comparable populations as defined by each state. For example, Colorado uses a blended rate that reflects the cost of care for the NF and HCBS populations. Most states, including California and Michigan, view PACE as an alternative to NF care and base the rate on spending for the NF population. In Oregon, PACE is also considered an alternative to NF care; however, based on its experience to date, the state has selected one subgroup of the assisted-living population as the most appropriate reference point for rate-setting purposes. (Assisted-living facilities offer help with activities such as eating, bathing, dressing, doing laundry, and housekeeping for people who need assistance but who want to live as independently as possible for as long as possible. Assisted living is not an alternative to a nursing facility but an intermediate level of long-term care appropriate for many seniors.)

¹ The Omnibus Budget Reconciliation Act of 1987 eliminated the Medicaid program's previous distinction between skilled nursing facilities and intermediate care facilities and established a single nursing facility category.



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**Medicaid payments to the
Program of All-Inclusive Care
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Consumers seem to use the labeling information primarily to determine nutritional content and to comparison shop (Derby and Fein 1995). A recent study of the ability of consumers to plan diets based on label information indicated labels to be an "inadequate tool." Although consumers can comparison shop across products and brands based on nutritional and ingredient information, they find it difficult to use this information to calculate consumption levels of various components in the context of a total diet. However, the "% Daily Value" information was found to aid in this information process (Levy and Fein 1998).

Research on consumer reaction to risk information reveals that individuals tend to be more responsive to information about negative consequences than

benefits (Bettman et al. 1987, Russo et al. 1986). The proliferation of fat-modified products in the market is a response to consumers' tendency to consume less of a "risky" component. Whether consumers are consuming more nutritionally beneficial components is not clear. This is a concern for certain populations, such as those at risk for chronic diseases.

Authorized health claims on labels were designed to increase the salience of information about nutritionally beneficial components. Those who read labels tend to have better knowledge of diet-disease relationships (Derby and Fein 1995). However, claims not diet-disease related (which do not require authorization) may confuse consumers and promote a product rather than inform decisions.

Has the NLEA met its objective in promoting a healthful food supply?

The market surveillance component of the FDA Food Label and Nutrition Tracking System monitored the sale of food products from supermarkets. It also tracked market share to determine if manufacturers were introducing more healthful foods, such as items lower in fat content. Researchers found an increase in market share of fat-modified products and a significant increase in such new products. For example, availability of fat-modified cookies went from about no percent of market share in 1991 to about 15 percent in 1995 (Levy and Derby 1996). ■

standardize the label, the NLEA provided specific statutory requirements on the description of nutritional content, ingredients, and health claims. The NLEA required the Food and Drug Administration (FDA) to regulate the authorization of health claims, especially disease-specific health claims. The agency was also required to undertake a consumer education initiative to increase awareness of the labeling changes and to help consumers incorporate the new information into their overall diet patterns.

In accordance with the measures, the FDA required standard nutritional information on all packaged foods, including information on serving size, saturated fat, cholesterol, dietary fiber, and other nutrients. Serving size standards enabled comparison shopping between similar products. The labels also included nutritional reference values or “% Daily Values” to provide consumers a benchmark to use in their decisionmaking process. Uniform definitions were required for terms that described the foods’ nutritional content (such as “low-fat” or “light”). Health claims that relayed information about a specific nutrient and its relationship to a disease (such as calcium reducing the risk of osteoporosis) had to obtain FDA approval. After market research, focus group research, and market analysis, the FDA attempted to include information that consumers both wanted and needed in formats that were user friendly (such as “bolded” headings, minimal fine print, and excluded information on ingredients of negligible amounts). The regulations went into full effect in August 1994.

NLEA objectives

The NLEA’s goals were to ensure that consumer information be provided in “a manner which enables the public to readily observe and comprehend such information and understand its relative significance in the context of a total daily diet” (NLEA of 1990, Pub. L. No. 101-535, 104 Stat. 2356). One goal was to help consumers identify and comprehend specific information on the food label. The second and related goal was to aid

consumers in putting this information in the context of their total food intake, thereby “either lowering the risk, or forestalling the onset, of a particular chronic disease condition” (FDA 1990). The third goal was to promote value-based competition among food producers and encourage a more healthful food supply.

Consumers can use labeling information to learn about food contents and nutritional characteristics, comparison shop between different products or brands, or manage a special diet (Levy and Derby 1996). Food labels were standardized to facilitate these multiple tasks.

Health claims, which appear on applicable foods, were designed to create a more salient message about the link between specific nutrients or contents and a health condition. To prevent abuses of health claims, the FDA determines the validity of claims on 10 specific diet-disease relationships. Claims must not be misleading and must be “supported by valid reliable and publicly available scientific evidence” and “consistent with generally recognized medical and nutrition principles for sound total dietary patterns” (FDA 1990).

The need for labeling measures: historical context

In the 1980s, two emerging trends contributed to the passage of the NLEA.

First, amassing scientific evidence lent credence to the relationship between dietary habits and the risk of chronic diseases (such as cancer, cardiovascular disease, obesity, and diabetes). Scientific investigation also showed that more consumers were eating excessive amounts of calories, fat, sodium, and cholesterol. As more meals were consumed away from home and as snacking became more prevalent and frequent, Americans’ consumption of fats, oils, and sugars increased in terms of total quantity and as a percentage of their daily intake (CNCFL 1990). The food label was considered an important tool in

relaying important messages to consumers—a tool that, by current standards, was not adequately or appropriately used.

The second trend that contributed to the passage of the NLEA was the rise in consumer awareness of and interest in food choices. Americans were becoming more conscious about nutrition and health. Consumers also demanded convenient foods that were also healthy, varied, and high in quality. Food manufacturers, in response to these demands and consumer interest, increasingly produced foods for the health conscious. By 1990, 12,000 new food products were introduced annually in the supermarket. About half of all packaged goods came with nutritional information on the label, and many of these carried health claims. Confusion about U.S. Recommended Daily Allowances abounded, and lack of standard serving sizes made comparisons difficult and open to manipulation by the manufacturer (CNCFL 1990).

Has NLEA met its objectives in promoting consumer use of label information?

Thus far, evidence suggests Americans’ use of food labels increased after the information standardization measures. To measure consumer, food processor, and manufacturer behavior, the FDA instituted a Food Label and Nutrition Tracking System. The component to track consumer behavior consisted of two nationally representative telephone surveys conducted before and after the full regulations took effect. Researchers found that 30 percent more consumers reported using quantitative information on the label “often” in November 1995 than in March 1994. More consumers also seemed to be aware that the government regulated information on the label (such as serving sizes), and fewer consumers felt that claims on food labels “are more like advertising than anything else” (Levy and Derby 1996).

Achieving market stability

McCormack and colleagues studied the level of market stability by measuring the number of medigap insurers before and after standardization. They found that the overall number of insurers remained relatively stable and that smaller carriers had left the market immediately after the legislation, although some did reenter the market within two years. Research found consensus among insurers, consumer advocacy groups, and state and federal regulators that the reduction in the number of carriers did not hurt consumer choice. (All 10 benefits options are now available through national carriers:

AARP/Prudential and State BC/BS.) In addition, no significant barriers to entry were found.

Obtaining better value

If the medigap standardization measures have achieved the objective of increasing competition among carriers, then consumers should be able to obtain better value. Benefits that are important to beneficiaries should be available at lower premiums, and insurers should be more likely to offer the medigap policies in greatest demand. Three benefits considered to have little value to consumers were dropped during the legislative process: SNF stays exceeding 100 days, vision care coverage, and private duty nursing. Two specific benefits not previously available—at-home recovery coverage and preventive services—were added to a few benefit packages in response to the demands of consumer advocate groups.

According to Rice and colleagues, the choice of benefit options appears to be demand driven. For example, the number of medigap insurance carriers offering a policy that covered prescription drugs (H, I, or J) increased from approximately 30 percent in 1991 to 60 percent in 1995. However, the percentage of beneficiaries purchasing policies with this benefit increased from 13 percent to only 15 percent. Insurers covering the Part B deductible rose from 59

percent in 1991 to 90 percent in 1994, and demand for policies with this benefit increased from about 21 percent to 58 percent over the same period. The benefit of preventive services was not found to be very attractive to consumers even though 55 percent of insurers made it available (Rice et al. 1997).

These findings show that demand for a benefit, not supply, appears to drive consumer choice. In other words, consumers tend to purchase medigap policies based on their preferences instead of marketing pressures. However, whether beneficiaries make the “right” decision—that is, choose the policy that best fits their preferences, health needs, and budget constraints—is another question. Research on the “effectiveness” of consumers’ medigap decisions in the prestandardization market showed that vulnerable beneficiaries especially needed help in choosing optimal policies (Rice et al. 1991). Similar research could help determine the effectiveness of consumer decisions in the post-standardization market.

Costs as well as benefits are part of the “better value” paradigm. In a more competitive market, consumers should pay less for similar services than they would otherwise. However, medigap insurers are subject to certain state and federal regulations in the post-standardization market. These regulations affect how they set their premiums (community rated, attained-age rated, or issue-age rated) and the proportion of premiums insurers may retain (by controlling the loss-ratio minimum). Premium prices have, in fact, increased dramatically in the post-standardization market, for example in certain markets premiums for medigap Plan C increased 8.5 percent annually between 1992 and 1996, and between 1995 and 1996 the premiums for the same increased 20.6 percent (HCFA 1998).¹ However, the premium ranges have narrowed, indicating more

competition due to standardization. A larger proportion of insurers also carries more comprehensive benefit packages, which may explain some premium increases. Finally, researchers have found that carriers that charge higher premiums than others lose market share (Rice et al. 1997).

Risk selection and limited innovation

More recent concerns relate to the high premiums associated with medigap policies that offer prescription drug benefits. Beneficiaries who expect to have high prescription drug costs may be more likely to purchase these policies than those who do not expect high costs. Medigap carriers, unable to spread risk effectively, must charge higher premiums to cover the aggregate higher costs. Because medigap policies are limited to 10 benefit packages, insurance companies have no flexibility to craft benefit packages to meet beneficiary needs. Additionally, carriers unable to compete on the basis of benefit packages also may have limited their ability to constrain increases in medigap premiums.

The food labeling example

To influence dietary patterns positively and reduce the risk of chronic diseases, the Congress passed the Nutritional Labeling and Education Act (NLEA) of 1990. Legislators believed that the NLEA, by requiring valid and reliable consumer information on labels, would foster informed decisionmaking in food purchases.

NLEA measures

The NLEA amended the Food, Drug, and Cosmetic Act of 1938 to require labeling on practically all packaged foods to specify the nutrient content information and the nature of specific health claims. To

¹ Plan C includes coverage for basic benefits, parts A and B deductibles, SNF coinsurance and foreign travel emergency. For an explanation of benefits covered by each package, see Guide to *Health Insurance for People With Medicare* issued by HCFA and NAIC in 1998.