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# Financing Health Care for Elderly Americans in the 1990s

Alan M. Garber

Although elderly Americans are better able to pay for medical care than ever before, there is a widespread perception that financing the health care of the elderly will pose a tremendous challenge to policymakers in the United States during the coming decades. The elderly have more comprehensive protection against the financial burden of paying for hospital and physicians' services than other segments of the population; more than 13 percent of all Americans lack health insurance, but only six-tenths of 1 percent of Americans 65 and older are uninsured (U.S. Bureau of the Census 1989, 96). The great majority participate in at least one of the two government programs that finance health care for the elderly, Medicare and the need-based Medicaid program. About two-thirds of the elderly purchase supplemental private insurance as well. Even as the elderly enjoy more comprehensive medical insurance than younger Americans, their well-being has improved absolutely and in relation to other demographic groups. For example, between 1970 and 1984, median incomes for families headed by 25-64-year-olds barely changed, rising from \$29,113 to \$29,292 (in 1984 dollars). During the same period, median incomes for families headed by persons 65 years of age or older rose from \$13,522 to \$18,236 (U.S. Senate Special Committee on Aging 1986, 57). Why, then, speak of a crisis in financing the health care of the elderly?

The challenge lies in the observation that government expenditures for the

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health care of the elderly are rising rapidly, yet the elderly continue to risk catastrophic health expenses. The growth in Medicare expenditures, which pay for hospital and physicians' services, has outstripped general inflation and cannot be attributed to demographic change alone. In 1967, its first full year of operation, total Medicare expenditures were \$4.6 billion. By 1984, Medicare expenditures had increased to \$62.9 billion (Division of National Cost Estimates 1987). The annual compound real rate of growth was 9.1 percent, far in excess of the growth in the number of Medicare enrollees. Only a small part of this growth rate could be explained by the increasing average age of Medicare enrollees. Rapid expenditure growth has continued despite well-publicized and controversial cost-containment programs.

Advocates of a greater role for public insurance emphasize that out-ofpocket expenditures for health care among Americans age 65 and older have not decreased in real terms since the Medicare program began. There are several explanations for the persistence of substantial out-of-pocket expenditures. One is the growth and diffusion of cost-increasing medical technology, which may have improved the care delivered to Medicare recipients and certainly has increased its cost (Schwartz 1987; Division of National Cost Estimates 1987). Because of relatively complete insurance coverage, however, hospital and physician services are rarely responsible for catastrophic out-of-pocket expenditures. Nursing home care and related services, however, can lead to large outof-pocket costs. Largely because its eligibility rules are so restrictive, the Medicare program pays for relatively little long-term care, which consists of nursing home care, home health care, and other services for chronic illnesses and disabilities. Only a small fraction of total nursing home care expenditures in the United States are reimbursed by the Medicare program. Medicaid spends much more for long-term care, paying for about 44 percent of all nursing home expenditures in 1987 (Letsch, Levit, and Waldo 1988). However, because it is a need-based program, Medicaid is unavailable to middle-class Americans until they have become impoverished by health expenditures.

Discussions of long-term care financing usually emphasize institutional care because it accounts for the preponderance of long-term care expenditures. In 1982, for example, when total expenditures for nursing home care in the United States were \$27 billion, Medicare and Medicaid together spent less than \$1.6 billion for home health care. Private expenditures for home health care in 1981 were estimated to be \$2.3 billion (Doty, Liu, and Wiener 1985).

While many recognize the need for improved financing of long-term care, opinions about the best solutions diverge. Some groups emphasize the need for a greater government role either in the provision of long-term care or in its financing. Others, noting the unexpectedly rapid rise in Medicare expenditures, argue that it would be preferable to develop private initiatives for long-term care.

In this paper, I briefly describe demographic trends that influence the utilization of health care, examine some of the financial issues surrounding hospital and physicians' services for the elderly, and discuss obstacles to more comprehensive financing and delivery of long-term care. Cost containment is the central theme of current discussions about financing hospital and physicians' services, while the issues in long-term care concern expanding coverage and reducing the risk of catastrophic costs for the elderly who are subject to the risk of institutionalization.

#### 7.1 Demographic Change and Financing Health Care

Even if prices and the mix of health services do not change, the "graying" of the U.S. population will promote health expenditure growth. Demographic changes account for only part of the recent inflation in health costs, but they will have a greater effect in the future. The 12 percent of the U.S. population age 65 and older are responsible for more than a third of all health expenditures. The number of Americans in this age group is expected to double by the time all the postwar "baby boom" generation reaches old age. Furthermore, among the elderly, health care utilization rises dramatically with age, so projections that the number of very old—age 85 and older—will quadruple in the next fifty years (U.S. Bureau of the Census 1984) suggest that health expenditures will soar.

Long-term care is even more closely tied to aging. A negligible fraction of the under-65 population reside in nursing homes. Among all individuals age 65 and older, between 4 and 5 percent will be in a nursing home at any time (table 7.1). The likelihood of being in a nursing home rises with age, reaching as high as 25 percent for a person who is age 85 or older. Over the past decade or so, the age-specific risk of being institutionalized appears to have declined slightly, but, even if this trend continues, if all else is equal, the shift in the age distribution of the American population will expand the number of nursing home residents. The effect on utilization of long-term care services, which are delivered primarily to the elderly, may even exceed the change in demand for physician or hospital care.

As health service utilization increases, the range of feasible options for financing care may become more limited. When the baby boom generation reaches older ages, the population that uses health care services and long-term care most heavily will grow as the working-age population shrinks. The ratio of elderly Medicare enrollees to currently employed adults may rise to 40 percent—that is, two retirees for every five workers (U.S. Senate Special Committee on Aging 1986, 21). Thus, even though today's Medicare budget deficit might be funded out of general revenues, that option will become less viable when the number of employed persons as a fraction of retirees shrinks. Political, economic, and demographic trends make it likely that the generation receiving the care will pay for it, either during their working years or after they have reached advanced age.

	9/3–/4, 19//, and	1985		
	1963	1973–74	1977	1985
All ages	25.4	44.7	47.1	46.2
65-74 years	7.9	12.3	14.4	12.5
75-84 years	39.6	57.7	64.0	57.7
85 years and older	148.4	257.3	225.9	220.3

Table 7.1 Nursing Home and Personal Care Home Residents 65 Years of Age and Over and Rate per 1,000 Population: United States, 1963, 1973–74, 1977, and 1985

Source: National Center for Health Statistics (1989, 123).

#### 7.2 Current Financing of Health Care for the Elderly

The vast majority of America's elderly participate in Medicare. The hospital insurance component of Medicare, Part A, formerly paid for up to ninety days of hospital care per year. The Supplemental Medical Insurance (SMI) component, or Medicare Part B, covers physicians' fees and fees for other professional services and supplies. More than 95 percent of elderly Americans participate in Part A, and a similar number pay a small monthly premium to participate in Part B (Health Care Financing Administration 1989).

At least until recently, about two-thirds of all elderly Americans purchased private health insurance to extend or complement their Medicare coverage. Much of this private insurance, usually called *medigap* insurance, paid for some or all of the deductibles and copayments under Medicare. Many of the policies also extended the number of days of coverage for hospital care, nursing home care, or both. Relatively few services that were excluded from Medicare benefits, such as prescription drugs and eyeglasses, were covered by medigap policies. The role of medigap policies is in flux because of the series of revisions of the Medicare program that began in 1988 with the passage of the Medicare Catastrophic Coverage Act.

The Catastrophic Coverage Act contained many of the features of medigap insurance policies. The new benefit structure, which was to be implemented in a series of steps, would have limited out-of-pocket expenditures for several covered services and expanded the services covered by Medicare. The Catastrophic Coverage Act mandated that, as of 1990, Medicare would pay for all Part B services in excess of \$1,370. After payment of a \$560 deductible, Medicare recipients would have unlimited coverage for inpatient hospital care. Prior to the passage of this bill, coverage was limited to ninety days of hospitalization, and patients bore a significant coinsurance burden. The catastrophic illness benefit was also designed to reduce out-of-pocket expenditures for outpatient prescription drugs, which Medicare had not covered previously. As of 1991, there was to be a \$600 deductible for prescription drugs and 50 percent copayments. In subsequent years, the copayment rate was to diminish, while a flexible deductible was planned, its size depending on the number of Medicare

beneficiaries who used the drug benefit. The deductible was to be indexed so that approximately 16.8 percent of all Medicare beneficiaries would qualify for the drug benefit at any time. Consequently, the deductible would have increased if pharmaceutical use or prices rose.

The Catastrophic Coverage Act added little to Medicare's limited coverage of long-term care. Only individuals confined to their homes ("homebound") were to be reimbursed for home health care. Coverage for several routine home health care services, such as occupational therapy and part-time services of home health aides, would have been extended only to persons who needed part-time skilled nursing care and met all other eligibility conditions. Homemaker services, drug administration, and blood transfusions were not covered.

Although the Catastrophic Coverage Act liberalized some of the rules for nursing home coverage under Medicare, the scope of coverage was not expanded dramatically. Prior to passage of the Catastrophic Coverage Act, Medicare paid for up to 100 days of nursing home care. The hospital insurance component of Medicare paid for all the covered services during the first twenty days in a nursing home, leaving a copayment for the twenty-first through the 100th day of hospital care. Several conditions had to be met, however, before a beneficiary could be reimbursed for any nursing home care. Nursing home coverage was limited to care in skilled nursing facilities, institutions that provide full-time or nearly full-time skilled nursing care. The patient had to be transferred to the skilled nursing facility in order to receive care for a condition that was treated in a hospital. The hospital admission preceding entry to the nursing home had to be at least three days long and had to occur in the thirty days prior to the nursing home admission. Admission to the nursing home required the approval of both a doctor and a utilization review committee. The Catastrophic Coverage Act eliminated the prior hospitalization requirement and raised the limit on nursing home care from 100 to 150 days per year. No deductible for skilled nursing care was proposed.

The Catastrophic Coverage Act was repealed before it was fully implemented. Controversy over its provisions erupted soon after it was passed. The funding mechanism—a surtax on the income tax of elderly Medicare enrollees—divided older Americans. Many of them faced added tax payments far exceeding the premiums they formerly paid for private supplemental insurance and far in excess of the actuarial value of the added benefits. A Congressional Budget Office report estimated that the program's benefits in 1989 were worth \$62.00 per enrollee while premiums averaged \$145 and were substantially more for high-income Medicare enrollees. For persons subject to the maximum surtax (incomes over \$35,000), the cost was fourteen times the value of the benefits (Tolchin 1989). Although the pressure for repeal came from people who objected to the surtax, others attacked the Catastrophic Coverage Act because it failed to extend long-term care coverage.

In recent years, because it limited eligibility for nursing home reimbursements and covered only 100 days of nursing home care each year, Medicare

has accounted for a small percentage of the overall payments for nursing home care. Of the \$40.6 billion spent for nursing home care, Medicare paid for 1.4 percent in 1987. Private long-term care insurance paid for less than 1 percent. The elderly and their families paid for about half of nursing home care. Medicaid paid for just under 44 percent, while other government and private sources paid the remainder (see table 7.2).

Although Medicaid, which is administered jointly by the states and the federal government, was designed to provide health insurance to low-income persons, its "spend-down" provisions have enabled many other Americans who have substantial medical or long-term care expenditures to draw on its benefits. The rules for Medicaid eligibility vary from state to state, but most state Medicaid programs have an eligibility category called medically needy. In the thirty-five states with medically needy programs, persons whose income net of health expenditures falls below 133 percent of the welfare level income are said to "spend down" and are eligible to receive Medicaid benefits. In 1984, the "allowed resources" or value of assets allowed for two-person households under state medically needy programs ranged from \$2,250 (in several states) to \$9,500 (in North Dakota). The allowed income after health expenditures for a two-person household ranged from \$135 (Tennessee) to \$583 (Wisconsin). Long stays in nursing homes are expensive—in 1986, it was estimated that nursing home care cost an average of \$22,000 annually in the United States (Bowen 1986). Because the long-term care expenditures of many middle-class institutionalized elderly approach or exceed total income, many are able to participate in Medicaid.

Largely because of its spend-down provision, Medicaid pays nearly half of all U.S. nursing home expenditures. The Medicaid benefit has been the source of discontent among many groups with disparate interests and opinions. Spending down is viewed by the elderly as a disruptive and often humiliating experience, discomfiting a group that is already disabled by chronic disease and forced to leave home for an institution. In some states, spouses' assets are not protected if an individual enters a nursing home and spends down. Anec-

Table 7.2 U.S. Aggregate Nursing Home Care Expenditures by Source of Funds: Selected Calendar Years, 1980–87 (billions of dollars)

Year	Total	Direct Patient Payments	All Third Parties	Private Health Insurance	Medicare _	Medicaid
1980	20.4	8.9	11.5	.2	.4	9.8
1983	29.4	14.1	15.3	.3	.5	13.0
1984	31.6	15.5	16.1	.3	.5	13.8
1985	34.7	17.2	17.4	.3	.5	15.0
1986	37.4	18.8	18.6	.3	.6	16.0
1987	40.6	20.0	20.6	.4	.6	17.8

Source: Letsch, Levit, and Waldo (1988).

dotes are told about elderly couples divorcing in order to preserve the assets of the independently living spouse. Yet Medicaid often bears the cost of nursing home care for a group of people who were never intended beneficiaries of the program. Furthermore, some people transfer assets prior to the spend-down period in order to escape loss of assets and income. The federal Office of the Inspector General claims that millions of dollars are lost to the Medicaid program each year because of lax efforts to recover assets for decedents who received Medicaid benefits. If all states recovered money "owed" to Medicaid by the estates of Medicaid beneficiaries as effectively as Oregon, the state with the most effective estate recovery program, \$589 million would be collected annually, according to the inspector general (Kidwell 1988).

Private insurance plays a smaller role in financing the health care of the elderly. Although the role of medigap policies will change in response to government actions, they are unlikely to begin to provide extensive coverage for long-term care. Nevertheless, private insurance has an important potential role in long-term care. Long-term care represents a frontier for private health insurers: although policies have been available for several years, private insurance currently pays less than 1 percent of all nursing home expenditures. To know why the role of private insurers has been so limited, it is necessary to review the characteristics of long-term care and the people who use it.

#### 7.3 Long-Term Care Utilization and Determinants

Because the number of disabled elderly is expected to grow over the coming years, and because the market for insurance against the financial risks generated by nursing home admission is poorly developed, there is substantial interest in promoting private long-term care insurance and innovative approaches to long-term care. Why has private insurance made few inroads into long-term care, and why has there been so little innovation in long-term care delivery? Many of the elements of demand for insurance are present: to the extent that elderly people who have prolonged admissions to nursing homes deplete their assets and income, they face financial catastrophe. The risk of institutionalization is small but not negligible. However, efforts to change long-term care financing and delivery have been stymied by our inadequate knowledge of the forces leading to nursing home admission, of the characteristics that distinguish individuals who spend long periods in nursing homes from those whose nursing home admissions are brief, of the interactions between nursing home utilization and hospital utilization, and of the distinctions between those health factors associated with high mortality and those that lead to nursing home admission.

Without this kind of information, both insurers and the elderly themselves have found it difficult to anticipate the risk of nursing home admission. There is even less information about the extent of adverse selection that would be faced by a private insurer. Regulatory barriers, uncertainty about future govern-

ment programs directed toward long-term care, and concerns about moral hazard aggravate these problems. For quite some time, economists have proposed that, by raising the demand for health care, health insurance is responsible for much of the growth in U.S. medical expenditures in recent decades (Feldstein 1973).

In view of the relative underdevelopment of insurance for long-term care, it is noteworthy that long-term care expenditures have grown much more slowly than expenditures for hospital and physicians' services. The experience of Medicare is instructive. Medicare expenditures rose from \$4.5 billion in 1967 to \$76 billion in 1986 (table 7.3). There is substantial disagreement about its causes, but the rapid rise in Medicare expenditures cannot be attributed to the rate of inflation in input prices, such as labor, nor can it be attributed to simple expansion of the number of Medicare recipients. Several experts believe that much of the growth in expenditures can be attributed to the development and dissemination of new health care "technology." Many new operations and diagnostic procedures had been developed during that period, and operations that were once performed only on middle-aged adults or younger people were performed increasingly often on the elderly. For example, in the 1970s, it was unusual for elderly Americans to undergo coronary artery bypass surgery. In 1972, Americans age 65–74 accounted for 8 percent of all coronary bypass operations. By 1981, they accounted for 28 percent of the procedures. The number of such operations performed in this age group rose from 2,500 in 1972 to 46,000 in 1981. The volume of other major operations performed on the elderly also grew during the same period (Valvona and Sloan 1985).

The circumstance that most favorably affected the development of such technology was the widened availability of health insurance, which lowered the price to the patient of having an operation or an expensive diagnostic procedure to the amount of the copayment. No such phenomenon has characterized

Table 7.3	Medicare Enrollees and Expenditures and Percentage Distribution,
	According to Type of Service: United States, Selected Years, 1967-86

Type of Service	1967	1970	1975	1980	1983	1984	1985	1986
Enrollees <sup>a</sup>	19.5	20.5	25.0	28.5	30.0	30.5	31.1	31.7
All expenditures <sup>b</sup>	4.5	7.1	15.6	35.7	57.4	62.9	70.5	76.0
All services <sup>c</sup>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Hospital care <sup>c</sup>	69.1	71.5	73.8	72.6	70.5	70.1	69.3	68.0
Physician services <sup>c</sup>	24.7	22.8	21.6	22.1	23.4	23.3	24.0	25.0
Nursing home care <sup>c</sup>	4.6	3.7	1.9	1.1	.9	.9	.8	.8
Other health services	1.6	1.9	2.8	4.1	5.3	5.7	5.9	6.2

Source: National Center for Health Statistics (1989, 174).

<sup>\*</sup>Millions.

<sup>&</sup>lt;sup>b</sup>Billions of dollars.

Percentage distribution of expenditures.

long-term care. Direct payments by the elderly and their families or fixed, low payments by Medicaid account for virtually all expenditures for nursing home care. Anecdotal evidence that Medicaid patients face very long waits for admission supports the claim that Medicaid reimburses nursing homes less than private payers do. Because most full payments are out-of-pocket expenditures, and because Medicaid, which pays less, is responsible for most third-party expenditures, nursing homes and other providers have had little incentive to develop possibly cost-increasing but more attractive long-term care.

Successful methods to limit utilization of long-term care would allay much of the concern that insurers have about long-term care insurance. They would still need to know, however, the likelihood that insurance subscribers will use long-term care, and they will need accurate predictions of long-term care expenditures for enrollees. Consequently, analyses of the utilization of nursing home care, particularly in relation to observable characteristics of the individuals, have become very important. In fact, if observable characteristics could explain a great deal of the variation in nursing home utilization, adverse selection might not be a severe problem for insurers. Of course, if insurers possess detailed risk information, many elderly men and women would be unable to purchase private long-term care insurance at an affordable premium.

Few studies have provided comprehensive estimates or forecasts of long-term care utilization. Many studies have been designed simply to estimate the risk that an individual will enter a nursing home during that person's remaining life or during a fixed time interval. Many other studies have examined the distribution of length of stay in a nursing home without reference to the probability of admission. Relatively few of them have examined the expected future utilization of nursing home care by an individual who currently lives in the community. This is the measure of utilization that is most important for estimating expenditures on behalf of a potential purchaser of long-term care insurance.

A full characterization of the demand for and supply of long-term care would be the best basis for anticipating the effect of insurance coverage. However, attempts to estimate supply and demand curves for long-term care services have been nearly absent from the literature. Furthermore, nearly all studies of long-term care utilization have concentrated on nursing homes, although several studies have examined substitution between home health services and nursing home utilization. These studies did not, however, attempt to estimate price elasticities. The most prominent exception is a paper by Chiswick (1976), which combined state- and metropolitan-level cross-sectional and time-series data to analyze nursing home supply and demand. Data and methodological limitations cast doubt on the validity of its findings, yet many of the results are plausible. The price elasticity of demand for nursing home care was negative, and aggregate demand for nursing home care was higher in areas with an older, more disabled, and wealthier population. Because the author did not have data on such characteristics as the percentage of elderly persons living alone, only

limited conclusions can be drawn about the effect of these correlates of areawide utilization. Particularly because other authors did not even attempt to control for some of the exogenous characteristics that influence the supply of nursing home care, such as average wage levels, this study represents a noteworthy attempt to characterize the market for nursing home services.

A number of problems make it difficult to estimate the supply and demand for long-term care services. Nursing homes are not homogeneous, so price variation may reflect differences in the services offered. More important, the price faced by the elderly person who enters a nursing home may not be observable; the price paid for six months of nursing home care by an elderly person facing spend down is much lower if his or her assets have already been depleted. Typically, a middle-class woman who spends down is first a "private pay" patient and enters a relatively desirable nursing home with little difficulty. She can stay in the nursing home after becoming a Medicaid beneficiary, but, if she is transferred to a hospital for a long admission (perhaps two weeks or longer), she may lose her nursing home bed. She must then apply for readmission, but, now that she is a Medicaid patient, she is more likely than a private pay patient to be rejected. Uncertainty about current and expected assets and the subjective probability distribution of the duration of institutionalization make it particularly difficult to infer the price faced by an individual.

Given these difficulties, it is not surprising that other studies of long-term care utilization have had narrower goals: predicting the number of people entering nursing homes, examining the determinants of nursing home utilization, or studying the interactions between nursing home and home health care. Many studies only attempted to predict the probability that a person will enter a nursing home during some fixed time interval or during that person's lifetime. Others examined only the duration of nursing home admissions. Finally, some studies used comprehensive measures of utilization, estimating the distribution of expected nursing home utilization for various groups of older people living in the community. Within this group are several studies that also attempt to examine interactions between home health care and nursing home utilization as well as the interactions between hospital and nursing home care.

Several studies (Shapiro and Webster 1984; Shapiro and Tate 1988; Cohen, Tell, and Wallack 1988; Greenburg and Ginn 1979; Branch and Jette 1982; and Lane et al. 1985) have examined the risk of admission to a nursing home in a fixed period. Others estimated the number of people who will be admitted to a nursing home at any time in their life (Palmore 1976; Vicente, Wiley, and Carrington 1979; McConnel 1984; and Cohen, Tell, and Wallack 1986b). These studies are a heterogeneous group, examining different populations, applying different statistical methods, predicting different aspects of utilization, and controlling for different underlying sources of variation in utilization. Consequently, estimates of the likelihood of admission to a nursing home vary greatly. However, the best estimate of the probability that a 65-year-old will later enter a nursing home is approximately 25 percent.

Several characteristics have been found to be consistently associated with the risk of institutionalization. Chief among these are advanced age, female gender, the presence of certain health conditions, severe functional impairments, and living alone. Those who receive Medicaid are more likely to enter nursing homes, while some studies, but not all, find that more wealthy people are less likely to enter nursing homes (Garber and MaCurdy 1989).

Few studies have attempted to forecast overall nursing home utilization. The studies of overall utilization that were not conducted as part of a trial of a health intervention include those by Manheim and Hughes (1986) and Cohen, Tell, and Wallack (1986a). There have been several investigations of the effects of community care interventions on nursing home utilization, but many did not have an appropriate control group, nor did they control for relevant characteristics of the participants. Others studied populations that may not be representative of the general U.S. population of elderly (Weissert 1985). Community care demonstrations directed toward preventing nursing home admission have been reviewed by Kemper, Applebaum, and Harrigan (1987). For the most part, these demonstrations have tested whether enriched sets of home health services and other community services could obviate admission to nursing homes. One national randomized controlled trial, the National Long-Term Care ("Channeling") Demonstration, has tested whether enhanced home health services can prevent nursing home admission and decrease long-term care expenditures. This study, which was sponsored by the Department of Health and Human Services, selected a group of very disabled elderly people who were predominantly poor, relatively old, and lacking in social supports (Kemper 1988). More than half of the Channeling participants were incontinent, and 84 percent were disabled in at least one activity of daily living. The intervention was case management, or the assignment of an individual, usually a social worker, to coordinate and help obtain care for Channeling participants (Phillips, Kemper, and Applebaum 1988). Although the enrollees who received the intervention obtained more home health services, their outcomes were not improved by the intervention. Furthermore, overall costs in the intervention group were somewhat higher than in the control group (Thornton, Dunstan, and Kemper 1988). During the first year of the randomized trial, participants who received the intervention spent an average of twenty-five days in nursing homes, while control group utilization averaged twenty-nine days. Increased use of home services offset the slightly lower expenditures for nursing home care. The use of hospitals and physicians' services was unaffected by case management (Wooldridge and Schore 1988). Nursing home utilization was no higher than expected for other persons of the same age, but mortality rates in both the treatment and the control groups were very high (nearly a third of the participants died within a year of enrollment), and it is possible that nursing home utilization would have been greater in a disabled but less sickly group of elderly (Garber and MaCurdy 1989).

The findings of research on the determinants of long-term care utilization

suggest that social factors play an important part. These factors, which are not as easily quantified as a laboratory test or a physical characteristic, pose problems for third-party payers who reimburse long-term care. In view of the challenges posed by long-term care, we next turn to the solutions that are currently being evaluated or marketed.

### 7.4 New Approaches to Private Financing of Long-Term Care

The slow development and adoption of long-term care insurance reflects the unique characteristics of long-term care. There can be little doubt that insurers were slow to develop and market insurance for long-term care because they feared that adverse selection, moral hazard, and demographic uncertainty would be serious obstacles. In many respects, the informational asymmetries and inefficiencies that have characterized health care insurance are likely to be magnified in the case of long-term care. As a result, thin coverage and rigorous exclusions have characterized most of the policies offered.

Perhaps the most important barrier to the development of either private long-term care insurance or capitated health care plans is adverse selection. Poverty, lack of social supports, and functional disability are important risk factors for institutionalization. While insurance companies may partially observe these characteristics, the purchaser knows a great deal more about the beneficiary's health status and level of function. Any party that indemnifies, reimburses services, or directly provides care faces these same problems. If the insurer or provider had sufficient information about the functional status and social supports of elderly people, reluctance to provide insurance might diminish.

Protection against adverse selection takes many forms. For example, the premiums for private long-term care insurance rise rapidly with the age at enrollment. Presumably a woman at age 40 or 50 has little information about her future risk of nursing home admission, relative to others at the same age. At age 70, she is much more likely than the insurer to know whether she is particularly likely (or unlikely) to enter a nursing home. Other methods to deter adverse selection are the imposition of waiting periods before benefits can be collected and the exclusion of preexisting conditions or particular conditions that are very common among nursing home residents, such as dementia. Of course, while narrow coverage and multiple exclusions may deter adverse selection, they diminish insurance coverage for all enrollees and compromise the desirability of the long-term care insurance package. Thus, it is not surprising that few policies with highly restrictive benefits have been sold.

Moral hazard may have a greater effect on long-term care utilization than on hospital or physicians' services. In health care, the presence of moral hazard means simply that there is a price effect—that insurance that pays a substantial fraction of the cost of medical care will increase the quantity demanded. It is no longer tenable to hold that the demand for hospital and physicians' services is inelastic in the long run and that only "needed" services will be provided to

patients. There is no obvious standard for either the quantity or the quality of care "needed." Even if the demand for care were inelastic in the short run, long-run expenditures for treating specific conditions can rise because of the adoption and diffusion of more costly new medical technology or the wider application of existing technology. Thus, as the price to the consumer (the copayment) falls, the quantity demanded rises, and the long-run effects are likely to be magnified by technological change.

Demand for long-term care is likely, in the long run, to be highly sensitive to price because there are substitutes for the housing and many of the service components of nursing home care. Food, homemaking, and other personal services are potentially desirable to any elderly person, whether disabled or not. The likelihood that these services will be "overused" is great. Even large copayments and deductibles are unlikely to eliminate what is perceived as inappropriate use of these services. Thus, insurers and care providers often allocate these services by using a rationing mechanism based on screening examinations, which determine "need" for long-term care, rather than price. The ability to evaluate the need for long-term care services is at a primitive stage and relies heavily on subjective reports by the family and the enrollee, who have an obvious incentive to obscure disabilities when seeking to buy insurance and to emphasize impairments when they seek reimbursement. For many acute medical services, laboratory tests and other measures that are less subject to direct manipulation by the enrollee are available. Thus, moral hazard is likely to remain a significant challenge to any form of prepayment or insurance for long-term care.

Uncertainty about the length of life and trends in the disability of elderly persons further complicate long-term care financing. There is little information about changes in average morbidity over time among elderly Americans and the resulting changes in expected utilization of long-term care services. Usually, long-term care insurance plans allow individuals to pay fixed premiums that vary with the age of initial enrollment. If the elderly live longer but agespecific levels of disability do not diminish, insurers who charge a fixed premium will face unexpected liabilities. Furthermore, if spouses and children provide less care for disabled elderly in the future, the demand for paid long-term care services will grow. However, the demographic uncertainty is likely to become less important as information about the determinants and magnitude of long-term care utilization improves.

Uncertainty regarding government action is another potential deterrent. Will new government policies obviate the need for private long-term care insurance or other private financing mechanisms? If this is an important reason for the reluctance of elderly Americans to purchase long-term care insurance, it is one that some insurers have already addressed. Some plans have arrangements to refund premiums if government policy creates insurance with similar coverage for all elderly Americans.

Long-term care insurance plans and other private plans for delivering or

financing long-term care have addressed these problems in several ways. Reducing the insurer's risk means, however, increasing the risk faced by the insured or denying coverage to many potential enrollees. There is every reason to believe that insurers and providers will refine their ability to assess enrollee risk as they gain more experience with long-term care insurance and as new findings emerge from research on predictors of institutionalization.

Despite the remaining challenges, private long-term care insurance is becoming an important component of long-term care financing. The Health Insurance Association of America reported that, in 1988, the number of companies selling long-term care insurance was six times the number in 1984. By December 1988, an estimated 1.1 million policies had been sold. It seems clear that broader coverage promoted expansion in the market for long-term care insurance. Plans introduced in 1988 and later tended to eliminate prior hospitalization requirements for nursing home admission and to provide benefits for a longer period. Furthermore, exclusions for such conditions as Alzheimer's disease and for preexisting conditions became less common. A greater proportion of policies guaranteed renewability (Van Gelder and Johnson 1989). It seems likely that private long-term care insurance, which was unattractive to purchasers because it formerly paid benefits only under a restrictive set of circumstances, will become an increasingly important means of financing nursing home care in the next decade.

Nevertheless, private insurance may not finance all or most long-term care in the coming years. Long-term care insurance is likely to be affordable if purchased during working years, so private insurance could have an expanded role by the time baby boomers have aged. According to simulation estimates from the Brookings-ICF long-term care financing model, about 58 percent of all elderly early in the next century will be covered by private long-term care insurance purchased during working years. Insurance purchased after retirement will cover fewer people (Rubin, Wiener, and Meiners 1989). Private insurance, unless subsidized, is also unlikely to finance care for low-income, high-risk men and women, like many Medicaid enrollees.

Attention to private long-term care insurance is complemented by interest in social health maintenance organizations and continuing-care retirement communities or life-care communities. Social HMOs extend the concept of a prepaid capitated health care plan to provision of long-term care services. Like conventional HMOs, social HMOs typically rely on fixed annual payments to give providers an incentive to limit the quantity of services delivered. Preliminary results from a nationwide demonstration of social HMOs indicate that this form of care, which seeks to diminish costs by placing the health care provider at risk for any costs arising from care of the subscribers, may not be profitable. Although the reasons for the lack of success of the demonstration social HMOs is unclear, unexpectedly low enrollment is a major contributing factor.

Life-care communities, which usually combine housing with social and

health services, are also becoming popular. Their characteristics vary greatly from one state to another because they are subject to state regulation. These communities, which often provide long-term care services to their members, frequently self-insure. Nursing homes are sometimes on the campus of these communities, although nursing home care is often provided off premise under contractual arrangements. The fees for joining these communities vary greatly. Typically, there is a large initial payment for the purchase of a condominium in the life-care community, with additional monthly fees. For life-care communities that insure or provide long-term care services, the incentives and risks are the same as for social HMOs: because they bear the financial risk for any nursing home care or other costly long-term care required by its members, they have an incentive to underprovide such care.

Federal agencies and Congress have discussed several other options for government financing of long-term care. One of the options is expansion of Medicare benefits so that reimbursement for long-term care would parallel coverage under Medicaid but would be extended to all elderly Americans (Blumenthal et al. 1986). Financing such a program would likely prove contentious. It might be much more costly than the Medicare Catastrophic Coverage Act coverage; younger Americans would resist paying more for health care for the elderly, and older Americans who would bear the cost of a surtax would object even more strongly. As an alternative, the Reagan administration had discussed the feasibility of utilizing tax-deferred saving vehicles to induce individuals to save money for possible catastrophic health care or long-term care costs. The tax-saving vehicle, called an individual medical account (IMA), has not progressed far in legislative debates or within the Department of Health and Human Services. The drawbacks, according to several critics, are that participation would be lower than for IRAs, that participation in the IRA program was limited, and that such a program would favor the wealthy. Thus, the IMAs are viewed as a potential tool to help a small minority of elderly Americans at risk of long-term care pay for their future long-term care services.

Other saving devices might diminish the need for long-term care insurance if the elderly had enough liquid assets at the time they needed long-term care. One alternative would enable the elderly to convert their main asset, the homes that many of them own, into liquid wealth. Reverse annuity mortgages are one means of converting housing wealth into cash, without selling or leaving one's residence, but thus far few elderly persons have participated in the programs. It remains to be seen whether these or other mechanisms to convert assets will contribute substantially to long-term care financing; however, according to a report from the Brookings Institution based on a simulation model, because many of the elderly have substantial home equity, equity conversions could be a valuable source of funds to pay for long-term care insurance (Rivlin and Wiener 1988).

Moral hazard is likely to remain a significant challenge for long-term care insurance, whether privately or publicly funded. There are several mechanisms

for limiting utilization of free or heavily subsidized long-term care services, and while (acute) health care services have long been a testing ground for plans to limit moral hazard, there is far less experience in long-term care. Functional status testing, as noted above, can be used to determine eligibility for benefits. Large copayments and deductibles can limit service use by providing less than full indemnification for costs of long-term care. Of course, such mechanisms are likely to be less than fully effective, and they limit the extent of insurance. Insurers may explore other mechanisms for limiting their costs, such as contracting with nursing homes directly. They have taken a similar approach to hospital and physicians' services, and, while there is little evidence that contracting (with "preferred providers") limits utilization, it may limit expenditures inasmuch as it lowers the price that insurers pay. However, none of these solutions has eliminated the effect of moral hazard in the market for physicians' and hospital services. Partly because HMOs have been more successful than conventional fee-for-service plans in this regard, the conventional wisdom is that provider incentives are a key component of successful efforts to control moral hazard.

Another way to limit utilization, and to ensure appropriate utilization, is case management. Case management, such as the intervention in the Channeling demonstration, means that a professional is designated to coordinate the delivery of long-term care services to an elderly disabled individual. The motivation for such an approach is the hope that, with adequate provision of home health care and related services, people who are otherwise likely to enter nursing homes will not do so. Furthermore, case management might deter inappropriate utilization of long-term care services generally. Unfortunately, the evidence that such an intervention would lower nursing home utilization or costs of long-term care is at best mixed, as noted above. Consequently, while case management appears to be a sensible approach to improving long-term care delivery, and while it could be applied with either public or private insurance, there is little evidence that it will help insurers or capitated health plans reduce their risk.

#### 7.5 Concluding Comments

Because demographic factors will increase demand for both long-term care and conventional medical services, financing the health care of the elderly is sure to remain an important issue in the United States throughout the coming decades. Like other forms of insurance, long-term care insurance should protect subscribers from the risk of catastrophic expenditures, but moral hazard and adverse selection may render comprehensive coverage unprofitable. Will these considerations lead to greater federal involvement in long-term care financing? Are private financing mechanisms likely to overcome these obstacles and play a larger role in the future?

After experiencing years of escalating health expenditures, legislators and

voters are understandably reluctant to add long-term care to federal expenditures for health care. Efforts to contain Medicare expenditures have had mixed success; in the 1980s, when prospective payment dampened the growth in Medicare's hospital expenditures, physicians' payments rose sharply. The consequences of expanded government financing of long-term care are unknown, but there are many reasons to be cautious. Because expenditures for long-term care costs may be more difficult to control than expenditures for hospital and physicians' services, legislators may be reluctant to augment benefits for nursing homes and home health care. Medicaid does pay for a substantial fraction of long-term care, but it is not an attractive model for future financing. Private approaches to financing and delivering long-term care seem to be a more viable first step.

Many of the elderly will be unable to purchase private long-term care insurance because they have manifest disabilities. In the longer run, marketing longterm care insurance to younger persons should help prevent adverse selection. That is one reason why private long-term care insurance is expected to play a larger role in the future and a larger fraction of the elderly will be protected from the costs of long-term care. However, moral hazard will remain an obstacle to the efficient functioning of a long-term care insurance market. In order to make sure that costs do not rise as rapidly as the costs of conventional health insurance, payers will need to adopt a more deliberate approach to evaluating new forms of long-term care. Medical treatments have been adopted and widely disseminated before their benefits were tested. In many cases, they were later found to be ineffective. Because pharmaceutical companies, equipment manufacturers, and care providers had an incentive to provide innovative care and patients bore little of the cost themselves, new technology has become synonymous with increased costs. At least in the near term, insurance is not likely to induce major technological innovations in long-term care. But the major components of long-term care include housing and food services. As large numbers of people purchase long-term care insurance, nursing homes are likely to change their character, many of them providing higher-quality housing and related services. Many individuals who would not consider entering a nursing home today would be willing to do so if quality improved in this sense. Unless insurers learn to allocate long-term care services by criteria that are judged as fair and acceptable to enrollees, the costs of long-term care insurance could grow as rapidly as the costs of conventional health insurance.

An alternative approach would emphasize the prevention of the disabilities that lead persons to seek long-term care. Some (e.g., Somers 1984) have argued that well-placed efforts to prevent chronic disability might be effective. If the disabilities due to the chronic syndromes and diseases that lead to the heavy use of long-term care services—such as dementia, heart disease, musculoskeletal disease, stroke, and urinary and fecal incontinence—can be reduced, the demand for long-term care might well diminish.

Unfortunately, there is little evidence that available treatments can signifi-

cantly diminish the morbidity of these conditions. The specific cause of Alzheimer's disease, the most common form of dementia in the elderly, is unknown, and it cannot be prevented or effectively treated. One can be more sanguine about other illnesses. Medications that prevent heart attacks and stroke by lowering cholesterol and by lowering elevated blood pressure are available. The overall mortality rates from cardiovascular disease in the United States have fallen in recent years. However, the reduction in coronary heart disease that results from either cholesterol reduction or the lowering of a mildly elevated blood pressure (the most common form of high blood pressure) is modest. While there are treatments that effectively relieve some of the symptoms of arthritis and other forms of musculoskeletal disease, most forms can be neither prevented nor cured. In fact, there are few data available to determine whether age-adjusted disability levels among the elderly in the United States have fallen in recent years. While there is some evidence that there may have been a modest reduction in age-adjusted disability (Fries 1980; Palmore 1986; Poterba and Summers 1987), it is unlikely that future reductions in disability will offset the growing number of elderly who are at risk for developing disability (Verbrugge 1984). Thus, it is doubtful that either prevention or new developments in the treatment of disabling conditions will substantially diminish the need for long-term care within the next two decades.

Because Americans will continue to be subject to the risk of developing the health impairments that make long-term care necessary, long-term care financing will remain an important policy issue. No simple change in long-term care financing will satisfy the desire for complete coverage without leading to "overutilization," particularly because moral hazard will remain an important obstacle for both public and private insurance. Insurers have entered the market for long-term care insurance cautiously, well aware of these problems and of the cost inflation that has plagued health insurance during the past thirty years. Along with the private insurers, the government will play a large role in financing long-term care, as a regulator and as a payer. Although the mix will change, a combination of public and private sources will almost surely continue to finance long-term care. Recent experience suggests, however, that any program that increases net governmental outlays will meet with resistance and that private financing mechanisms will pay for a growing fraction of long-term care. Furthermore, because transfers across generations will not pay for longterm care indefinitely, funding for both publicly and privately financed longterm care will ultimately come from savings: enforced savings (taxation or mandatory program participation), tax-favored voluntary savings, and insurance premium payments that have a large savings component.

Perhaps a technological breakthrough will someday obviate the need for long-term care by preventing the chronic diseases associated with institutionalization. Until such a solution becomes available, the mode of financing long-term care will have a profound effect on the well-being of elderly Americans.

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