
Simulating the Fiscal and Distributional Impacts of Medicaid Eligibility Reforms

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About 43 percent of nursing home costs are paid by Medicaid for the poor and for those who spend-down assets to qualify for Medicaid. We estimate the costs and distributional impacts of changes in the Medicaid asset test and the effect on the number of people spending down to Medicaid eligibility levels. Increasing asset thresholds from \$2,000 to \$12,000 would cost less than \$4 billion, reduce spend-down rates, and increase the proportion of people eligible for Medicaid on admission to a nursing home. Even after such a change, about 80 percent of Medicaid benefits accrue to individuals with incomes less than \$10,000.

INTRODUCTION

It has been more than 25 years since Congress enacted the Medicaid program to meet the challenge of providing medical assistance to low-income individuals and families. Since that time, Medicaid has operated as a vendor payment program, reimbursing providers of services for eligible enrollees. Although most Medicaid spending is for acute care, Medicaid is also the major source of public funding for long-term institutional care, account-

ing for slightly more than 43 percent of total spending by all sources (Carpenter, 1988; Office of National Cost Estimates, 1990). By 1992, Federal Medicaid expenditures on all long-term institutional care exceeded \$33 billion (Burwell, 1993). Medicaid covers care provided in skilled nursing facilities, intermediate care facilities, and long-term stays in psychiatric and rehabilitation hospitals.

The Federal Government, States, and, in some instances, localities share in the cost of the program by means of a matching formula. The Federal Government finances more than one-half the total cost of the program. States are required by law to provide Medicaid to recipients of income payments from Supplemental Security Income (SSI) and from Aid to Families with Dependent Children (AFDC), as well as to certain other low-income groups including pregnant women and children.

Within broad Federal parameters, States determine who is eligible for Medicaid, what kinds of services they get, and how much providers of those services are paid. As a result, there are 55 separate Medicaid programs that differ one from the other, often in significant ways. It is therefore difficult to make statements about how Medicaid works on a national level. There are, however, commonalities with regard to program eligibility for the elderly and disabled, who are the primary users of long-term care services.

This research was supported by the Health Insurance Association of America. Marc A. Cohen is with LifePlans, and the JDC-Brookdale Institute of Gerontology, Jerusalem, Israel; Nanda Kumar is with LifePlans and Boston University; and Stanley S. Wallack is with LifePlans and Brandeis University. The opinions expressed in this article are those of the authors and do not necessarily reflect the views or policy positions of the Health Care Financing Administration, LifePlans, Brandeis University, Boston University, or JDC-Brookdale Institute of Gerontology.

The majority of elderly and disabled Medicaid recipients live in the community and qualify for Medicaid through SSI eligibility. Thus, they have both low current income (below the poverty level in all but a few States) and very limited assets. Because the costs of institutional care are so high, however, all States use much more generous income standards in determining Medicaid eligibility for nursing home residents. In 37 States with medically needy programs that cover institutional services for the elderly and disabled, someone who cannot pay the monthly cost of nursing home care from current income and whose assets are within Medicaid limits will meet the Medicaid income eligibility test. The other 13 States have elected to use a fixed-dollar income standard for nursing home residents that is much higher than the income standard used for Medicaid recipients living in the community. (Generally, the standard used is three times the basic SSI payment.)

Because many elders have current income that does not exceed Medicaid income standards for nursing home residents, Medicaid's asset test becomes the dominant factor in determining whether nursing home entrants will be eligible for Medicaid. Typically, income-eligible single individuals are eligible for Medicaid upon admission to a nursing home if their assets (not counting their home) are less than \$2,000. A few States use somewhat higher limits.

Married couples can keep more if one spouse is institutionalized. This is because the Medicare Catastrophic Coverage Act of 1988 substantially changed the rules for determining Medicaid eligibility for persons in nursing home with a non-institutionalized spouse. Currently, all

countable assets held by either spouse are totaled and divided equally between them. In 1993, however, all States were required to allow the community spouse to keep at least \$14,148 in countable assets, but no more than \$70,740. These amounts are increased by the Consumer Price Index on an annual basis. The purpose of this change was to protect the spouse of a nursing home recipient from being impoverished by the costs of the nursing home resident's care. In keeping with this objective, the legislation also allows community spouses to keep income in an amount at least 133 percent of the Federal poverty level for a couple—\$1,149 in 1993—and up to \$1,749 per month in certain circumstances.

For both single and married nursing home users, whose assets exceed the permitted amount, the individual must pay for care privately, presumably using both current income and assets, until assets are reduced to the eligibility level. This process of asset depletion is popularly called "spend down." (It is important to note that even those individuals who are discharged from a nursing home before their assets are depleted to Medicaid eligibility may feel like "spend downers" if they have spent most of their assets to pay for care. Such individuals will not, however, be identified as "spend downers" in most data files.)

In all cases, Medicaid-eligible nursing home residents are expected to contribute most of their income toward the cost of care. Except for a small personal needs allowance (typically \$50 per month or less) and allowances for a spouse and certain medical expenses, the resident's entire income is expected to be paid to the nursing home. Medicaid then pays the difference between the resident's ex-

pected contribution and the established Medicaid rate for the facility.

RECENT FINDINGS ON MEDICAID ELIGIBILITY

Much of the impetus for reform in the long-term care (LTC) system stems from the perception of Medicaid as an unfair and inhumane program. This impression is based on the opinion that nursing home residents without spouses should not have to use up (or if the need is foreseen early enough, give away) virtually all of their liquid assets before becoming eligible for assistance in paying long-term care bills. In the popular phrasing, elders who enter a nursing home impoverish themselves by paying for care out of pocket and only then receive assistance through Medicaid to pay for care.

However, in judging the "fairness" of the Medicaid program, one needs to consider its underlying objectives. With regard to all services, including LTC services, the primary aim of the program is to assure that low-income and poor individuals have financial access to care. Therefore, because it is meant to be a means-tested program, middle and upper income elders were not intended to be beneficiaries of Medicaid—at least so long as they had the resources to pay for care. The underlying presumption is that these individuals and their families would pay for care out of pocket. More recently, risk-pooling mechanisms like private LTC insurance are meant to assure that middle and upper income elderly need not spend all of their resources to pay for nursing home care.

In analyzing spend-down data, there is an implicit assumption that individuals who spend down to Medicaid eligibility

levels are those who exhaust their resources paying for nursing home care. Evidence suggests, however, that individuals may transfer their assets before entering a nursing home or transfer them at some point during their stay to establish Medicaid eligibility (Burwell, 1991; Moses, 1990). Thus, the spend-down phenomenon may also be a reflection of the success of middle and upper income elderly nursing home entrants in transferring their assets in order to establish Medicaid eligibility.

Recent studies suggest that fewer nursing home entrants go through the spend down (or impoverishment) process than the popular paradigm suggests. Using national data bases, research by Short et al. (1992), Spence and Wiener (1990a), Rice (1989), Liu and Manton (1989), and Liu, Doty, and Manton (1990) suggests the following:

- The probability that an individual entering a nursing home as a private payer will spend-down assets and/or income to Medicaid eligibility levels is somewhere between 10 and 20 percent.
- Roughly 33 to 40 percent of all individuals entering nursing homes are eligible for immediate Medicaid benefits. On any given day, nearly 60 percent of nursing home residents may have Medicaid as a payment source.
- About one-third of the individuals who do not have Medicaid as a payment source at admission to a nursing home remain private payers throughout their stay.
- The probability of spending down increases by length of stay; about three-fourths of individuals who spend down will do so within their first 2 years in a nursing home.

Although there does seem to be a convergence of estimates based on national data sources, the methods and data used to generate figures are not without their shortcomings. First, studies based on the 1985 national nursing home discharge resident file—Spence and Wiener (1990b) and Rice (1989)—may somewhat underestimate the extent of spend down because a discharge survey underrepresents long-stay nursing home patients, that is, those individuals who have a greater chance of spending down. Second, State and national data indicate that a significant number of nursing home residents have had previous stays or multiple admissions to nursing homes (National Center for Health Statistics, 1989; Gruenberg et al., 1989). Yet, the 1985 National Nursing Home Survey (conducted by the National Center for Health Statistics) is only able to track those prior stays that occurred within the survey year and not those that occurred in previous years. Thus, it is quite possible that individuals entering the nursing home as Medicaid eligible have spent down during a previous stay, a finding not easily obtainable from an analysis of the 1985 survey. Such a result would lead to an underestimate of the number of individuals spending down. Also, the study by Short et al. (1992) relies on data from nursing home residents, which means that individuals with long-stays are overrepresented. A sample based on nursing home residents will, therefore, overestimate the number of people for whom Medicaid is a payment source. Finally, the Liu and Manton (1989) analysis, which relied on data from the 1982 and 1984 National Long-Term Care Survey (U.S. Department of Health and Human Services, 1988) could only focus on the experience of individuals over a 2-

year period. As a result, their figure of a 10-percent spend-down rate may be a lower bound estimate because it is limited to a 2-year period and not to the total length of stay that a cohort of individuals spends in a nursing home.

A number of recent studies based on State data also suggest a spend-down rate of somewhat less than 25 percent of nursing home entrants. (Liu and Manton, 1991; Gruenberg et al., 1989; Schofield, Pattee, and Liu, 1988). Liu and Manton (1991) were able to trace the use of an admission cohort of Connecticut residents for a 9-year period. They found that 14 percent of individuals spent down to Medicaid eligibility levels and that one-half of individuals spent down over 1 year after entry to a nursing home. Because of great differences in the demographic and economic characteristics of the elderly across States, the varying State nursing home bed supply and Medicaid policies, and the differing availability of substitute services, it is difficult to generalize findings from State studies to the U.S. population as a whole, even when such studies yield results similar to national estimates. Nevertheless these studies also suggest that most nursing home entrants do not spend down to Medicaid eligibility levels.

Although there does seem to be a convergence of estimates regarding the extent of spend down, the processes behind the phenomenon are not well understood. There is little information on the relationship between income and assets and spend-down rates and Medicaid eligibility. For this reason, it is difficult to predict with a high degree of accuracy the impact of changes in program structure on the number of Medicaid recipients and on Medicaid expenditures.

Purpose

The purpose of this article is to build on previous work relating to the issue of Medicaid spend down and Medicaid reform. Our major point of reference is the work completed by Rivlin and Wiener (1988), which is based on the Brookings/ICF LTC simulation model that simulated the fiscal impacts of Medicaid reform, and Spence and Wiener (1990a), who estimated spend-down rates in the population. Despite the shortcomings previously mentioned, these comprehensive studies undertake a number of sensitivity analyses with alternative assumptions that validate the rather low rate (i.e., less than 20 percent) of spend down in the population. Although these published studies provide important information, a number of important questions remain unanswered. These include:

- How do rates of spend down vary with changes in Medicaid's asset test?
- To what extent does the number of individuals eligible for Medicaid on admission to a nursing home vary with changes in Medicaid's asset test?
- How are the marginal Medicaid benefits associated with changes in the asset test distributed across different income groups.
- How are total Medicaid benefits distributed across different income groups when the asset test is varied?

Answering these questions is the primary aim of this article. The focus on changes in the asset test is warranted because a number of States (e.g., Connecticut and New York) have implemented public-private partnerships and other States (e.g., California) are considering doing so. These partnerships, in effect, change the asset test for establishing

Medicaid eligibility. Moreover, at the Federal level, the Kennelly Bill proposes that individuals who purchase LTC insurance can exclude assets (for the purposes of establishing Medicaid eligibility) in an amount equal to the LTC insurance protection that they have purchased (Kennelly, 1991). Finally, President Clinton's health care reform proposal seeks greater liberalization of the asset test for Medicaid. The motivations behind support for Medicaid reform are varied but include the desire to help the elderly protect their estates, to encourage growth in the LTC insurance marketplace, to increase public support for the Medicaid program and reduce the need for implementing a more costly national LTC insurance program, and to ensure that the States remain involved in direct financing of LTC.

Method for Establishing the Base Case

There are two classes of Medicaid beneficiaries: (1) those who spend down to Medicaid eligibility levels once in a nursing home (i.e. spend downers) and (2) those who are already eligible for Medicaid at entry to a nursing home (Medicaid eligibles). Two major problems hamper efforts to estimate the fiscal impact of changes in the asset test on total expenditures and on expenditures for these different classes of beneficiaries. First, there is a lack of data on the income and asset profile of nursing home entrants and on individuals who receive Medicaid at some time during their stay. Second, there are little data on the relationship between income and asset levels and the length of stay in a nursing home. Even the independent effect of income on nursing home admissions has not been consistently confirmed through empirical stud-

ies (Rivlin and Wiener, 1988; Liu and Manton, 1989).

To evaluate the impact of changes in Medicaid policy, one must first determine the income and asset profile of nursing home entrants that generates the actual distribution of "spend downers," "private payers," and "Medicaid eligibles" in the population. Nursing home entrants are classified as follows:

Spend downers—An individual enters a nursing home and stays for a period of time greater than what could be paid for out of current income and assets (excluding \$2,000).

Medicaid Eligible—An individual enters nursing home and within 1 month of entry cannot pay for care out of current income and assets (excluding \$2,000).

Private Payers—An individual enters a nursing home and has the income and assets to pay for care throughout the entire stay.

The starting point for our analysis is that between 10 percent and 20 percent of nursing home entrants are spend downers and between 33 percent and 40 percent of entrants are Medicaid eligibles (Spence and Wiener, 1990a).

Nursing Home Entrants

Income and Asset Status

We assume that compared with the elderly population as a whole, individuals who spend down to Medicaid or are eligible for Medicaid at admission to a nursing home have lower income and asset levels. To begin to identify this subset of lower income individuals, we focus on a growing body of literature that examines the demand for and affordability of LTC insurance (Cohen, Kumar, and Wallack,

1993; Friedland, 1990; Ball and Bethell, 1989; Rivlin and Wiener, 1988). These studies suggest that even though there may be individuals of modest means who can afford private LTC insurance, individuals with significant income and assets will likely comprise the majority of the market. The population of elderly may be thought of as comprised of two rather distinct groups: those who for the most part may be considered to be potential LTC insurance purchasers and those who cannot be considered as such. For the purposes of this analysis, individuals in the latter group are considered to be "potential Medicaid recipients."

Recently published data indicate that for the most part LTC insurance purchasers are much wealthier than their counterparts in the general population. For example, 52 percent of purchasers have incomes in excess of \$25,000, compared with only 17 percent of the general population of elders. Moreover, roughly 40 percent of purchasers have assets in excess of \$100,000, compared with only 8 percent of general elders (Cohen, Kumar, and Wallack, 1993).

Based on interviews with insurance industry representatives and marketing personnel, an income and asset profile for individuals targeted as potential LTC insurance purchasers was developed. Such individuals were assessed to have more than \$15,000 in assets, enough income to purchase "luxury" items (like LTC insurance), and income levels that did not put them at significant risk of being eligible for needing Medicaid early in the course of a nursing home stay. Table 1, which is based on the subjective views of insurance industry representatives, shows the criteria that were used to classify individuals as either potential Medi-

caid recipients or potential LTC insurance purchasers.

This analysis provides a useful starting point for identifying the subpopulation group that is most likely to be considered potential Medicaid recipients. These are individuals who would either qualify for Medicaid at initial entry to a nursing home or who would likely spend down to Medicaid eligibility if they were in a nursing home for a significant length of time. Another way to view the data is that, on average, those identified as potential Medicaid recipients can finance less than 2 years of nursing home care, whereas those identified as non-Medicaid recipients can finance more than 2 years of care.

Table 2, which is based on data from the Survey of Income and Program Participation and Income of the Elderly Age 55 or Over (U.S. Bureau of the Census, 1986), summarizes the income and asset profile of the individuals that we have identified as potential Medicaid recipients. The percent in the table represent the probability of being in a particular income and asset category for each particular age group, given that an individual is defined as a potential Medicaid recipient.

The vast majority of individuals comprising the potential Medicaid population are unmarried (82 percent). For the most part, single individuals are concentrated in the income group less than \$15,000, and married couples typically have incomes greater than \$15,000. For example, in the age group 75-84 years, 16 percent of unmarried couples have incomes greater than \$15,000 compared with 54 percent of married couples.

Simulating the Spend-Down Process

To simulate the spend-down process, we combine information on the income and asset profile of nursing home entrants with data on the amount of time people remain in nursing homes. The length-of-stay (LOS) distribution is based on work completed by the Brookings Institution analyzing the 1985 National Nursing Home Survey (Spence and Wiener, 1990b). This study converted nursing home discharges into an admissions cohort and tied together multiple admissions occurring within a single year. Their method could underestimate ultimate LOS because individuals with multiple admissions outside of the survey

Table 1
Income and Asset Levels for Classifying the Population as Potential Medicaid Recipients or Potential Long-Term Care Insurance Purchasers, by Age

Income Level	Asset Level			
	Potential Medicaid Recipient		Potential Long-Term Care Insurance Purchasers	
	65-74 Years	75 Years or Over	65-74 Years	75 Years or Over
Less than \$10,000	< \$30,000	< \$60,000	> \$30,000	> \$60,000
\$10,000-\$14,999	< 20,000	< 35,000	> 20,000	> 35,000
\$15,000-\$30,000	< 15,000	< 25,000	> 15,000	> 25,000
More than \$30,000	< 15,000	< 25,000	> 15,000	> 25,000
			Percent	
Age Group Meeting Criteria	46	60	54	40

NOTE: Assets do not include home equity.

SOURCES: Interviews with representatives from Amex, John Hancock, Aetna, Prudential, and Travelers, 1989. Report in Life Plans, Inc.: *Financing Long-Term Care: The Impact of Alternative Public Programs and the Potential of Private Insurance*, Health Insurance Association of America, 1990.

year would not have their LOS accounted for. More recent studies (one based on State data and the other based on the reports of next-of-kin about their deceased relatives stay in a nursing home) suggest that the proportion of individuals staying in a nursing home for more than 5 years may be twice as great as that shown by the Brookings study (Liu and Manton, 1991; Kemper, Murtaugh, and Spillane 1990).

We reviewed the structure of State Medicaid programs to ascertain the eligibility criteria for what could be considered a "typical" program. We assume that individuals will be eligible for Medicaid

once assets reach \$2,000 and that \$50 per month can be kept as a personal-needs allowance. The average daily cost of nursing home care is estimated to be \$70.

The vast majority of nursing home residents (75 percent to 83 percent) are unmarried (Hing, 1987; Spence and Wiener, 1990b). Thus, for the most part, single individuals are more likely to receive Medicaid benefits. However, the new spousal impoverishment rules mean that Medicaid eligibility may be established more quickly for married nursing home entrants because at least \$14,148 in assets are excludable. Because of the large variation in the way that States apply these

Table 2
Distribution of Potential Medicaid Recipients by Age, Income, and Asset Status: 1986

Age and Asset Status	Income			
	Less Than \$10,000	\$10,000- \$14,999	\$15,000- \$29,999	More Than \$30,000
65-74 Years				
Less than \$2,000	31	9	9	4
\$2,000 to \$10,000	10	6	7	3
\$10,000 to \$20,000	7	5	4	1
\$20,000 to \$30,000	4	—	—	—
\$30,000 to \$50,000	—	—	—	—
\$50,000 to \$100,000	—	—	—	—
More Than \$100,000	—	—	—	—
Percent	52	20	20	8
75-84 Years				
Less than \$2,000	41	3	2	1
\$2,000 to \$10,000	15	4	4	1
\$10,000 to \$20,000	8	4	2	—
\$20,000 to \$30,000	6	4	—	—
\$30,000 to \$50,000	5	—	—	—
\$50,000 to \$100,000	—	—	—	—
More Than \$100,000	—	—	—	—
Percent	75	15	8	2
85 Years or Over				
Less than \$2,000	42	3	1	1
\$2,000 to \$10,000	18	3	2	—
\$10,000 to \$20,000	6	3	1	1
\$20,000 to \$30,000	5	3	1	—
\$30,000 to \$50,000	5	5	—	—
\$50,000 to \$100,000	—	—	—	—
More Than \$100,000	—	—	—	—
Percent	76	17	5	2
Percent of Weighted Total	61	19	14	6

NOTES: Income and asset distribution for individuals classified as potential Medicaid recipients. Includes both single and married individuals. These asset categories exclude equity in a home. About one-third (31 percent) of individuals between 65 and 74 years of age who are identified as potential Medicaid recipients have incomes less than \$10,000 and assets less than \$2,000.

SOURCE: (U.S. Bureau of the Census, 1986).

Table 3

Amount of Time to Spend Down to Medicaid Eligibility Levels, by Income and Asset Levels

Asset Level	Less Than \$10,000	\$10,000- \$14,999	\$15,000- \$29,999	More Than \$30,000 ¹
	Amount of Time in Months			
\$1,000	0.00	0.00	0.00	—
\$2,000	0.00	0.00	0.00	—
\$3,000	.65	.86	3.33	—
\$4,000	1.30	1.72	6.67	—
\$5,000	1.96	2.58	10.00	—
\$6,000	2.61	3.44	13.33	—
\$7,000	3.26	4.30	16.67	—
\$8,000	3.91	5.16	20.00	—
\$9,000	4.57	6.02	23.33	—
\$10,000	5.22	6.88	26.67	—
\$12,000	6.52	8.60	33.33	—
\$15,000	8.48	11.18	43.33	—
\$20,000	11.74	15.48	60.00	—
\$25,000	15.00	19.78	76.67	—
\$35,000	21.53	28.37	110.00	—
\$75,000	47.62	62.77	243.33	—
\$125,000	80.24	105.76	410.00	—

¹The average income of individuals with incomes of \$30,000 or more is approximately \$40,000. This annual income can support nursing home payments of \$70 per day indefinitely. Therefore, in the model, these individuals do not spend down to Medicaid eligibility.

NOTES: Cost of nursing home care is \$70 per day. The personal needs allowance is \$50 per month. Individuals with less than \$2,000 are immediately eligible for Medicaid.

SOURCE: Life Plans, Inc.: Model simulations.

rules, a detailed analysis of the fiscal impacts of Medicaid reforms on single versus married individuals is beyond the scope of this article. Where possible, we isolate the impacts of program changes on married and single individuals and point out the possible directions of the bias in the simulation.

The first step in modeling the spend-down process is to determine the amount of time it would take for individuals with different levels of income and assets to spend down to Medicaid eligibility levels (Table 3).

For each of the 68 income and asset combinations, we then determine the probability that the LOS in a nursing home is greater than the LOS that would exhaust resources and establish Medicaid eligibility. Thus, for example, for an individual with income of \$7,500 and assets of \$20,000, it would take about 12 months to spend down to Medicaid eligibility

levels.¹ The probability that an individual entering a nursing home would stay for a period longer than this is 37 percent (Spence and Wiener, 1990b). This probability (37 percent) is then weighted by the proportion of potential Medicaid recipients in that particular income and asset category, this representing the spend-down rate for a nursing home entrant with this level of income and assets. When like probabilities are determined for all income and asset categories, they are summed to arrive at the total proportion spending down among potential Medicaid recipients.

The same procedure is completed for all 68 income and asset combinations for the population group identified as poten-

¹Given an annual income of \$7,500, an individual can spend roughly \$19 per day on nursing home care— $(\$7,500 - \$600)/12/30 = \$19$. Thus, \$51 must be funded from assets to cover the daily nursing home costs of \$70. A Medicaid eligibility threshold of \$2,000 means that \$18,000 is available to pay the remaining \$51 per day. It takes 353 days, or roughly 1 year, to use up \$18,000 at \$51 per day.

tial LTC insurance purchasers. The spend-down rates in both population groups are then weighted (by the proportion of nursing home entrants deriving from each group) and added together to determine the total spend down rate in the population.

Assumed is that the probability of being in a particular income and asset category and the probability of experiencing a particular LOS are independent and unrelated events. This may be a rather simplistic assumption and it is likely that some relationship does exist although its direction is uncertain. On the one hand, compared with poorer individuals, those with more wealth may be better able to transition back into the community should their physical condition permit. Therefore, if nursing home care is viewed as an inferior good, a higher level of wealth would imply lower use. On the other hand, if nursing home care is viewed as a normal good, then higher levels of wealth should lead to greater use of the service, hence longer lengths of stay. Because data are inconclusive, we assume that an individual with a given level of income and assets has an equal chance of being a short-stay nursing home resident as a long-stay resident.

Two conceptually appealing results flow from this assumption. First, individuals with longer LOSs are more likely to spend down than are individuals with shorter LOSs. Second, individuals with lower levels of income and assets are more likely to spend down than are individuals with higher resource levels. Noteworthy is the fact that unmarried individuals, who have lower incomes than their married counterparts, are between 1.2 and 1.3 times as likely to spend more than 5 years in a nursing home than are married residents (Brookings Institution and

Lewin/ICF, 1990). Moreover, 70 percent of married residents spend less than 6 months in a nursing home compared with 30 percent of single entrants. This again supports the proposition that the likelihood of spend down is far greater for single individuals than for married couples.

If the income and asset distribution imputed to individuals defined as potential Medicaid recipients is sensible, then the proportion of individuals who spend down to Medicaid eligibility should fall within the 10-percent to 20-percent range. Analyses of the 1985 National Nursing Home Survey (Hing, 1987) reveal that the vast majority of nursing home entrants—67 percent—are 80 years of age or over. By our criteria, this age group also contains the greatest proportion of potential Medicaid recipients. In fact, if we assume independence between the financial profile of individuals and the probability of entering a nursing home, the age distribution of admissions produces the result that 65 percent of all nursing home entrants are drawn from the population of potential Medicaid recipients. Some of these people are eligible for Medicaid immediately on entry to a nursing home, whereas others spend down assets to obtain eligibility.

Given the LOS distribution and the imputed distribution of income and assets of nursing home entrants, the number of individuals spending down to Medicaid eligibility derived from the simulation is 15 percent. This figure is within the range of estimates obtained by other researchers. Thus, at the very least, the imputed income and asset distributions of nursing home entrants seem reasonable. When we substitute the longer LOS found in other studies—(Kemper, Murtaugh, and Spillane, 1990; Liu and Manton, 1991)—

we obtain a spend-down rate of 20 percent. Furthermore, when individuals and married couples are analyzed separately, spend-down rates are 17 percent and 5 percent, respectively. (For this analysis the simulation uses a \$14,148 threshold for married couples, a shorter LOS, and a higher income and asset distribution.)

Medicaid Eligibility at Admission

Research indicates that between 33 percent and 40 percent of all nursing home entrants have Medicaid as one of their sources of payment during their first month of admission. If we apply the same simulation technique as previously stated, then the issue becomes one of identifying the proportion of individuals who exhaust resources within their first month of residency in a nursing home. Given the distribution of income and assets among potential Medicaid recipients, there is a 53-percent chance that nursing home entrants from this group will exhaust resources in less than 30 days. (This is derived by combining data from Tables 2 and 3, which show the amount of time it takes individuals of specific income and asset profiles to spend down assets to Medicaid eligibility as well as the proportion of individuals in each income and asset category.) As mentioned, about 65 percent of all nursing home admissions originate from this population; thus, the weighted rate of Medicaid eligibles (i.e., those immediately eligible for Medicaid benefits) is 34 percent, which is within the range obtained from national studies. (By definition, none of the individuals identified as potential LTC insurance purchasers would be eligible for Medicaid within the first month of nursing home residency.)

Liberalizing the Asset Test

Impact on Spend-Down Rates

When Medicaid eligibility rules change, so too will the proportion of spend-downers and Medicaid eligibles. Using the method described earlier, we illustrate the impact of such changes in Table 4. The table also summarizes the effect of liberalization of the asset test.

The major effect of increasing the asset threshold (at least up to \$20,000) would be to make more individuals eligible for Medicaid at initial entry to a nursing home, thus reducing the overall rate of spend down. In fact, among individuals identified as potential Medicaid recipients, between 53 percent and 81 percent would be eligible for benefits during their first month of residency, depending on the asset threshold chosen (not shown in the table). Also, as asset thresholds are increased, more middle-income persons are likely to spend down to Medicaid eligibility levels: At an asset threshold of \$15,000, about 3 percent of individuals identified as potential LTC purchasers would spend down (not shown in the table). However, the connotation of spend down may be very different in that individuals will be able to keep a sizeable amount of assets and still receive Medicaid benefits. It should also be mentioned that as Medicaid eligibility rules change, so too will the attractiveness of LTC insurance. More liberal asset tests may make private LTC insurance less attractive because the need to protect assets is diminished and public coverage is more available.

Impact on Medicaid Expenditures

Currently Medicaid program costs reflect an underlying distribution of spend

downers and Medicaid eligibles. The simulation model enables us to estimate the difference in daily liability to the Medicaid program between Medicaid eligibles and those who spend down. The latter have a somewhat higher level of income than do Medicaid eligibles, which means that on an ongoing basis, they contribute more to nursing home costs than do those who are eligible for benefits at initial nursing home entry. We estimate that individuals who spend down to Medicaid cost the program 15 percent less per day than do those who are initially eligible at entry to a nursing home. Also, we find that it takes 57 percent of individuals who spend down more than a year to do so. This is comparable to data from Connecticut that show that about one-half of individuals who spend down do so after a year's stay (Liu and Manton, 1991). An analysis of the National Medical Expenditures Survey shows that 64 percent of individuals spending down do so in their first year (Short et al., 1992). Thus, because of their higher income levels and their "delayed" Medicaid eligibility, on an annual basis, those who spend down are less costly to the Medicaid program than are Medicaid eligibles.

To estimate the fiscal impact of alternative asset thresholds for 1991, we assess

the changing Medicaid liability associated with shifts in the proportion of Medicaid eligibles and those who spend down. Three groups contribute to changes in the overall liability to Medicaid: (1) those who would spend down but because of a change in the asset test become eligible for Medicaid at initial entry to a nursing home; (2) Medicaid eligibles who have assets of more than \$2,000—about 20 percent—and thus cost the program more as asset tests change; and (3) individuals entering nursing homes for whom Medicaid now becomes a payment source (either as spenddowners or Medicaid eligibles).

Table 5 shows the point estimates for the annual additional costs (in 1991 dollars) to Medicaid of alternative asset thresholds assuming reforms would be fully implemented. Medicaid expenditures for nursing home care in 1991 were about \$21 billion (Burwell, 1993).

Depending on the asset threshold chosen, the increase in Medicaid expenditures for nursing home care varies between 3 percent and 26 percent. For example, a program that increased the Medicaid eligibility asset threshold from \$2,000 to \$12,000 would cost about \$4 billion. Medicaid nursing home expenditures would increase from \$21 billion to

Table 4
Impact of Changes in Medicaid Eligibility Rules on the Probability of Spend Down and Initial Medicaid Eligibility

Asset Threshold	Probability of Spend Down	Probability of Initial Medicaid Eligibility	Proportion of Entrants Receiving Medicaid Payments
\$2,000	0.15	0.34	0.49
\$4,000	0.11	0.39	0.50
\$8,000	0.09	0.44	0.53
\$10,000	0.09	0.45	0.54
\$12,000	0.07	0.48	0.55
\$15,000	0.07	0.51	0.58
\$20,000	0.06	0.53	0.59

SOURCE: Life Plans, Inc.: Model simulations.

about \$25 billion. As a percent of total LTC costs, Medicaid would pay 50 percent of costs instead of the current 43 percent. The primary factor leading to the increased costs is the increased number of Medicaid eligibles; that is, there is a change in the mix of Medicaid reimbursed individuals away from those who spend down to Medicaid eligibility toward those who are eligible at admission. The marginal cost to Medicaid is the difference between what Medicaid would pay when the individual spent down versus what Medicaid must now pay given eligibility at admission.

Additional analysis reveal that in the absence of a significant behavioral response (e.g., asset transfer), the spousal impoverishment rules implemented in 1989 would not be particularly costly. In fact, if married individuals comprise roughly 20 percent of all nursing home entrants, then changing the asset test from \$2,000 to \$14,148 adds between \$0.6 and \$0.9 billion in costs to the program.

Table 5
Additional Costs to Medicaid, by
Alternative Asset Thresholds (1991 dollars)

Asset Thresholds	Medicaid Costs in Billions			Percent of Total Nursing Home Costs
	Total	Marginal	Percent Increase	
\$2,000	\$21.0	—	—	43.0
\$4,000	21.7	\$0.7	3.3	44.4
\$8,000	23.4	2.4	11.4	47.9
\$10,000	23.6	2.6	12.4	48.3
\$12,000	24.8	3.8	18.1	50.1
\$15,000	25.7	4.7	22.4	52.6
\$20,000	26.6	5.6	26.7	54.7

NOTES: Assumes base case Medicaid expenditures of \$21 billion. Does not account for possible behavior responses—i.e., more aggressive asset sheltering—to program changes. Also, uncertainty is introduced into the simulation results because of lack of data on differential length-of-stay patterns among population subgroups, different State program configurations, and insufficient data on the relationship between income status and services use. Thus, the range around point estimates may be quite large.

SOURCE: Life Plans, Inc.; Model simulations.

Impact on Distribution of Benefits

The simulation model estimates spend-down rates, initial Medicaid eligibility rates and program costs for each of 68 different income and asset combinations and then aggregates results. Thus, it is relatively uncomplicated to disaggregate results and evaluate the distributional effects of Medicaid program changes on various income groups. Again, the effect on a particular income group is a function of how the number of Medicaid eligibles changes relative to the number of spend-downers within that particular income group. Figure 1 shows how the percent change in Medicaid benefits received by individuals in three income groups changes as the asset test changes. Figure 2 shows how the distribution of total Medicaid benefits across these groups changes as asset thresholds are varied.

Liberalizing asset thresholds targets benefits to individuals with incomes of less than \$30,000. Moreover, an increase in the asset threshold to \$15,000, leads to a marginal increase in Medicaid benefits of more than 80 percent for individuals with incomes between \$10,000 and \$15,000. Yet, even with substantially liberalized asset thresholds, 80 percent of total Medicaid dollars accrue to individuals with less than \$10,000.

By the way that eligibility rules are set, the Medicaid program targets benefits to low-income individuals. Even when asset tests are significantly liberalized, most benefits are received by individuals who receive Medicaid benefits at the current asset threshold of \$2,000. Such changes also benefit the relatively small number (less than 15 percent) of middle-income people who would otherwise spend down to Medicaid eligibility levels.

Figure 1
Distribution of Marginal Medicaid Benefits, by Income for Alternative Asset Thresholds

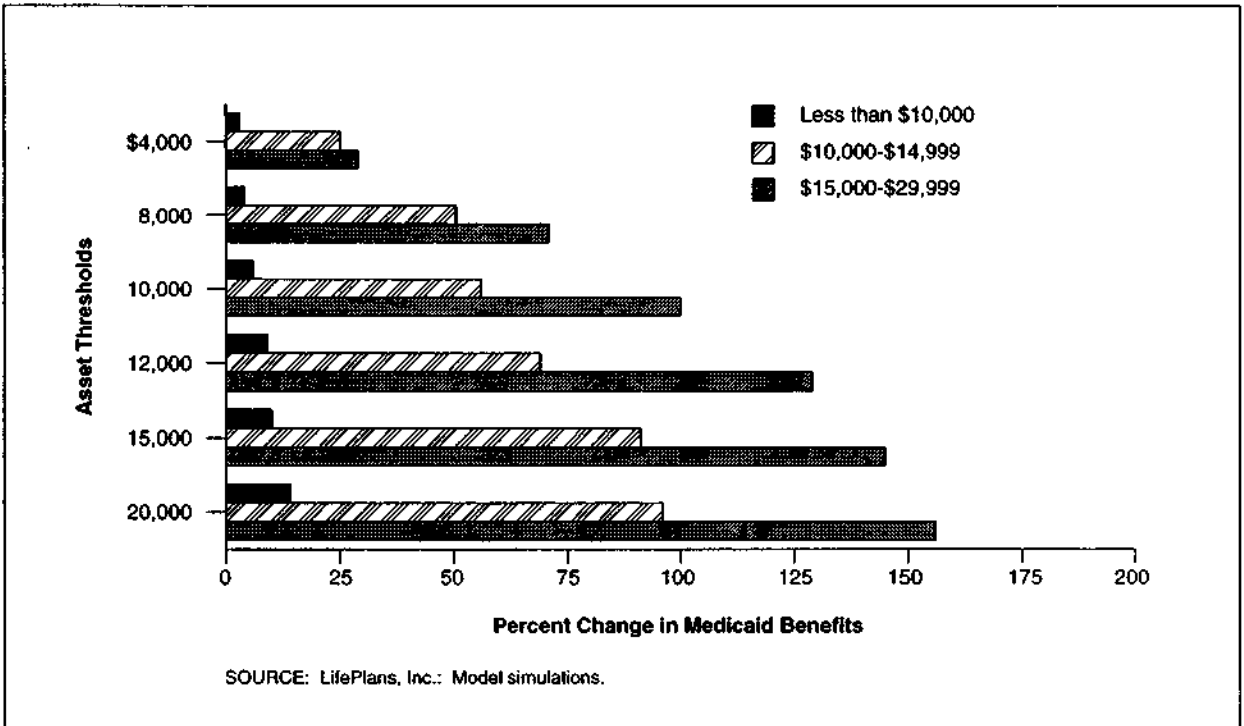
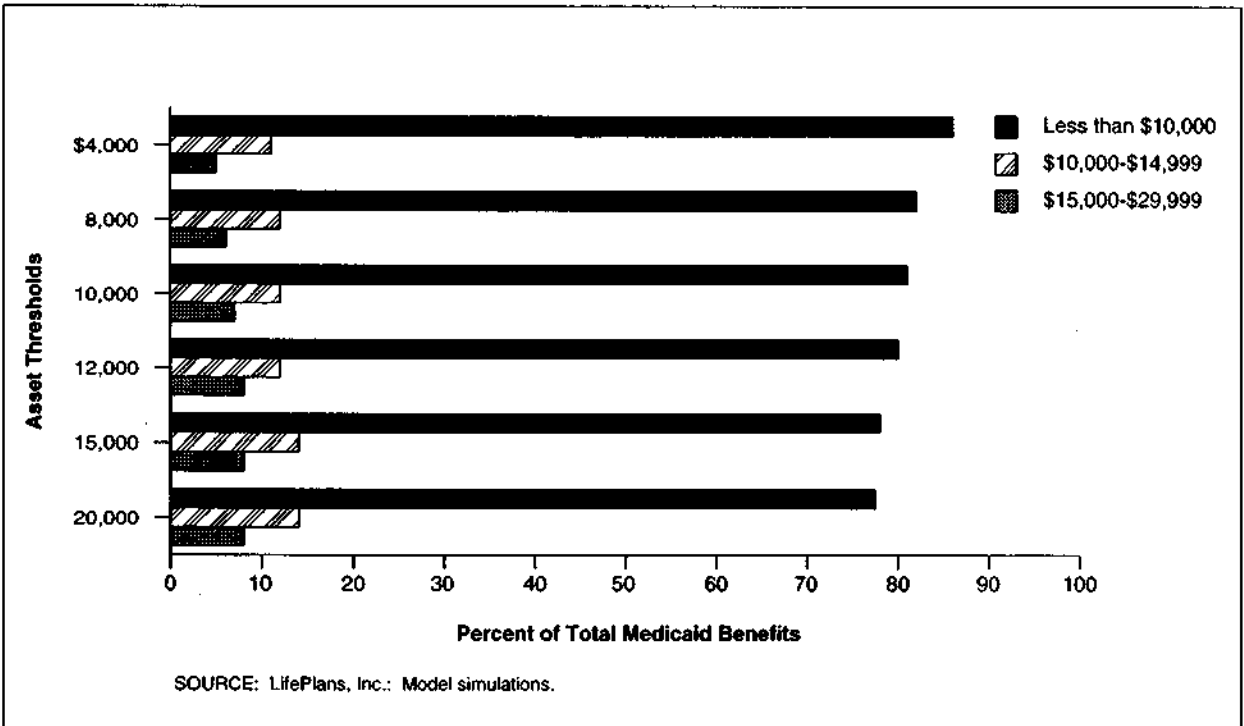


Figure 2
Distribution of Medicaid Benefits, by Income for Alternative Asset Thresholds



STUDY LIMITATIONS

Results presented in this simulation must be viewed with caution. It is difficult to model changes in the Medicaid program, in part, because there is wide variation in program configuration across States. Thus, Federal policy changes will have differential impacts on State programs. Moreover, empirical data on a number of key model parameters are weak. For example, there remains considerable disagreement about the amount of time that individuals actually spend in a nursing home (Spence and Wiener, 1990; Kemper, Murtaugh, and Spillane, 1990). Because LOS is a critical input to the simulation process, a great deal of uncertainty is introduced into the simulation. Moreover, as mentioned, the correlation between wealth and LOS has not been adequately researched, primarily because of a lack of reliable data.

The age-adjusted LOS and income and asset distributions reflect an underlying distribution of marital statuses. Yet, in the presence of spousal impoverishment program changes, asset liberalization will affect single individuals differently than married couples. For the most part, however, we do not distinguish between married couples and single individuals. In part, this is due to a concern about introducing a false level of precision to the analysis and, in part, to data limitations. Thus, the impact of program changes may be somewhat overstated. That is, although married individuals have shorter LOSs, are less likely to use nursing homes, and have higher levels of income and assets than do unmarried individuals, both groups are assigned equal liabilities associated with changes in the asset test.

Finally, and perhaps most importantly, ignored in the simulation is the possible range of behavioral responses that could accompany programmatic changes. Such responses could affect utilization of nursing home services by subgroups in the population as well as the asset transfer patterns of individuals. A widely held opinion is that the elderly do engage in transfer of assets in order to obtain Medicaid eligibility, but this has not been substantiated to date. The extent of such potential transfers cannot be quantified and has not been modeled in this simulation. That is to say, the imputed income and asset profile of potential Medicaid recipients does not account for the fact that individuals may engage in asset transfer. The implication is that the confidence intervals around point estimates presented in this article may be quite large. For example, just by varying LOS categories, we found that spend-down rates increased from 15 percent to 20 percent.

CONCLUSIONS

This analysis showed how modifications to Medicaid asset thresholds would affect total program costs for nursing home care, the distribution of benefits across population groups, and the number of individuals initially or subsequently eligible (through the spend-down process) for Medicaid. An increase in asset thresholds would lead to a reduction in the rate of spend-down among less wealthy nursing home entrants—who would become Medicaid-eligible at entry to a nursing home—and an increase in spend-down rates among wealthier entrants. Overall the rate of spend down in the population declines between 25 percent and 50 percent, depending on the asset threshold

chosen. At the same time, the proportion of nursing home entrants eligible for Medicaid during the first month of residency increases: If the asset test were increased to \$15,000, for example, about one-half of all nursing home entrants would be eligible for Medicaid at an additional program cost of \$4.1 billion (1991 dollars). The major beneficiaries of such changes remain low-income individuals, but an increasing proportion of benefits accrue to the middle class.

If a policy objective is to prevent individuals from depleting assets before qualifying for Medicaid payments, then modifying the eligibility criteria for Medicaid would have a significant impact. The cost of implementing such a change is relatively small when compared with the costs of social insurance approaches that provide back-end or front-end catastrophic protection (Short, 1992; Cohen et al., 1992; Dewey et al., 1988). Moreover, such an approach would distribute public benefits to individuals who cannot likely afford alternative financing sources like LTC insurance.

Yet, it is clear from other attempts aimed at changing the Medicaid program that incentives structured into a reform will encourage behavior changes (Bachman, Beatrice, and Altman, 1987). This is particularly true regarding the behavior of moderate-income individuals who can currently afford private insurance. A more "generous" Medicaid program may make private insurance less attractive because a greater proportion of assets will be protected by the public program, thus decreasing the need for private protection. Already, preliminary evidence suggests that the configuration of State Medicaid programs has an impact on the decision to purchase LTC insur-

ance (Cohen, Kumar, and Bishop, 1993). Thus, such a change may actually serve to reduce growth in the private insurance market among moderate-income individuals considering the purchase of LTC insurance.

President Clinton's health care reform does recommend changes in the asset test for Medicaid eligibility and the personal needs allowance. The major expansion in LTC financing is directed toward home- and community-based services for the severely disabled. A major reform effort in financing nursing home care is not likely to emerge in the near future.

Other proposals for reforming the LTC system have focused on various forms of social insurance or stimulation of the private market through tax clarifications (Davis and Rowland, 1986; Ball and Bethell, 1989; Kennedy, Simon, and Inouye, 1988; Mitchell, Chaffee, and Graham, 1988; Durenberger, 1989; Pepper Commission, 1990). Although the advantages of broad-based social insurance approaches are many—greater equity in access to benefits, broad sharing of expenses, and more—there are important concerns as well. First, social insurance programs are very costly—between \$15 and \$20 billion in additional public costs—and the burden for financing such approaches will most likely fall on the working population. Second, they serve to protect the assets of all elderly rather than target benefits to those who cannot afford private alternatives. Finally, in contrast to acute care, which is increasingly being viewed as a public good, there is no such consensus about LTC. The need for such care and the use of services is related to the availability of family support, lifestyle choices, and bequest motives—all factors related to the private domain. For this reason,

moving toward an exclusively public-financing role is unwarranted, especially in light of the fact that the private insurance market is rapidly growing.

The focus of the current debate on reforming the LTC system should be on determining the boundaries of public and private financing, developing strategies to encourage the private market, and improving public programs that serve those for whom private alternatives are not realistic options. The Medicaid reform simulated here clearly represents a relatively low-cost incremental approach. It builds on the underlying philosophy of the program—assuring financial access to care for those who cannot afford it—and preserves the basic structure of the program by targeting benefits to those for whom private alternatives may not be practical. The modest degree of asset protection that the reform will bring about may also broaden support for the program among middle-class elders. By implementing such a reform, the Federal Government would be sending a signal that it remains committed to improving the Medicaid program for the clients it serves and also expects the private market to continue to improve the products it provides to the growing elderly market it serves.

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