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Lifetime Patterns of Payment for Nursing Home Care

BRENDA C. SPILLMAN, PHD, AND PETER KEMPER, PHD

Although much is known about who pays the annual aggregate nursing home bill, relatively little is known about payment-source patterns of individuals during their lifetimes. In this article, lifetime payment-source patterns are analyzed for elderly nursing home users, particularly the extent to which they spend down assets to become eligible for Medicaid. During their lifetimes, 44% of persons who use nursing homes after 65 years of age start and end as private payers, 27% start and end as recipients of Medicaid benefits, and 14% spend down assets to become eligible for Medicaid benefits. Although still a relatively small proportion, the asset spend-down estimate based on lifetime data is 2.5 times previous national estimates based on data for single nursing home stays. The projected risk of spending down assets in nursing homes for all persons who turn 65 years of age in 1995, including users and nonusers of nursing homes, is slightly more than 6%. Equally or more important for policy is that 17% of all persons who turn 65 years of age can expect to end up using a nursing home and receiving Medicaid reimbursement. Of those, more than 3 in 5 will have entered the nursing home already eligible for Medicaid benefits. Key words: nursing home; long-term care; Medicaid spend-down; asset spend-down; financing nursing home care. (Med Care 1995;33:280-296)

Introduction

Nursing home expenditures in the United States were \$60 billion in 1991. These costs were borne roughly equally by private individuals and public programs, primarily Medicaid.¹ This large and rapidly growing cost has raised concern not only

among government officials about their Medicaid budgets, but also among individuals concerned whether they will be able to pay for what could be very long nursing home stays. Although a great deal is known about who pays the annual aggregate nursing home bill, relatively little is known regarding the payment-source patterns of individuals during their lifetimes. In this article, we analyze lifetime payment-source patterns for elderly nursing home users, particularly the extent to which they spend down their assets to become eligible for Medicaid.

Public Financing for Nursing Home Care

The major public program that pays for nursing home care is Medicaid, which covers approximately 47% of nursing home expenditures in a year.¹ Individuals are eligible

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for Medicaid coverage of nursing home care if they meet income and asset requirements. Actual eligibility rules are complex and vary widely from state to state.²⁻⁶ In the majority of states, single persons meet the income test if their incomes are less than certain income levels for the state or if residual income after paying for nursing home care plus other medical care is less than certain levels. After becoming eligible by meeting income standards, single persons must contribute all of their income, except for a small personal needs allowance (most commonly \$30 per month, although approximately half the states allow more than this required minimum), to the cost of their care. Before 1988, eligibility for married persons was based on income assigned according to which spouse actually received the income. After eligibility was determined, all of the couple's joint income was considered available to pay expenses of the institutionalized spouse. Only a modest amount of income, usually no more than the Supplemental Security Income benefit level, was protected for the community spouse. (As discussed further in the concluding section of the paper, the spousal impoverishment provisions of the Medicare Catastrophic Coverage Act [MCCA], passed in 1988 after the data used here were collected, liberalized eligibility requirements for married persons. This act simplified rules for how a couple's income is divided to determine eligibility and increased the income protected for a community spouse.)

The assets owned by a nursing home resident (other than a house, car, and a few other exempted assets) also must be less than a maximum allowed level, typically \$2,000. Individuals who meet the income test, but whose assets exceed the maximum asset level, can become eligible by depleting their assets to the level allowed by Medicaid, usually by paying for care. This process is known as "asset spend-down." (Again, married persons were subject to similar assets

rules until MCCA substantially increased the amount of assets protected for a community spouse.)

Medicare is the other important public program that pays for nursing home care. However, it covers only limited posthospital care. Only 20 days are fully covered, and an additional 80 days are subject to very large co-payments (in some cases exceeding the price of nursing home care). Because of these limits, Medicare pays for only 4.4% of aggregate nursing home expenditures annually.¹

Besides Medicaid and Medicare, public payment sources are limited to care paid for by the Department of Veterans Affairs and state-funded care, and a small amount of care is uncompensated or charity care. Because of the limitations on public payment sources, approximately 46% of annual expenditures are borne privately—paid for out of pocket by individuals and their families or, in a small proportion of cases, by private insurance.

Concern About Impoverishment and Policy Responses

A year of nursing home care at private-pay rates costs approximately \$30,000 per year. This exceeds the nonhousing assets of more than half the elderly.⁷ Thus, because approximately 25% of persons now 65 years of age are projected to spend 1 year or more in a nursing home,⁸ there is reason for individuals to be concerned about becoming impoverished and having to rely on Medicaid if they become institutionalized. In addition to any aversion some persons may have to receiving welfare, low Medicaid reimbursement rates relative to private-pay rates and constraints on bed supply in some states lead to concern over whether patients admitted to a nursing home on Medicaid reimbursement have access to the same quality of care available to private-pay patients.

Nursing-home users who receive Medicaid are made up of two groups. The first

group includes those who enter nursing homes already eligible for Medicaid. They may always have had low incomes; they may have become poor while living in the community because of high health-related expenses, loss of pension income when a spouse died, or other factors; or they may have qualified for Medicaid only when they entered the nursing home because of higher income criteria allowed for those in nursing homes.

The second group comprises persons who pay for care when they enter a nursing home, but subsequently spend down their assets to become eligible for Medicaid reimbursement. From the perspective of elderly persons who are not already poor, the prospect of spending down assets is the prospect of moving from financial independence to impoverishment of oneself or one's spouse, reducing ability to control care decisions and perhaps quality, and reducing the likelihood of being financially able to return to independence in the community. Thus, although it is common to think of those spending down in nursing homes as middle class and different from those who are already eligible for Medicaid benefits, the real distinction is the timing of impoverishment and the possibility of planning that could avoid it for those with some means.

Public concern over impoverishment of nursing home users has led to several public policy proposals. These proposals include encouraging the private insurance market through subsidies, improving information, and standardizing regulations; liberalizing Medicaid income and eligibility rules; and establishing new entitlements to cover nursing home care regardless of financial resources. These policies would affect all potential nursing home users, not just those who are likely to become impoverished.

Another proposed policy that directly addresses the fear of spending down assets is currently being tried in four states.⁹ This

program, developed by the Robert Wood Johnson Foundation's Program to Promote Long-Term Care Insurance for the Elderly, guarantees that individuals or couples can receive Medicaid benefits while retaining additional assets beyond the amounts allowed under Medicaid, provided they buy private long-term-care insurance. Such an asset spend-down protection program is intended to encourage purchase of insurance, to reduce incentives to transfer assets to heirs, and to potentially save money by replacing Medicaid payments for some portion of purchasers who otherwise would spend down and receive Medicaid assistance. Extension of this program to further states has been effectively precluded by recent legislation because of fears that such a policy would impose large costs on Medicaid programs and would serve primarily to preserve estates of middle class persons. Despite this change, asset spend-down protection is still prominent in current national debate regarding how to pay for nursing home care.

Purpose

Despite the importance for individual planning and policy decisions, patterns of payment sources for nursing home care over a person's lifetime, and in particular, the likelihood that a person will spend down assets in the nursing home, have remained an open question because of data limitations. (See Adams et al.¹⁰ for a comprehensive review of the literature regarding nursing home asset spend-down.) As discussed further below, most previous studies have used data based on samples of single nursing home stays, or on admission cohorts followed for less than a person's lifetime. As a result, these studies do not accurately reflect lifetime payment-source patterns. For example, these studies underestimate asset spend-down over a lifetime because they cannot take into account prior or subsequent stays during

which individuals may have exhausted—or might yet exhaust—assets.* Previously analyzed data that most nearly approximate lifetime experience for a cohort are for a single state.^{11–14} However, because of the wide variation in state Medicaid rules governing eligibility for nursing home benefits and financial status of residents, there is no reason to expect estimates for any individual state to be indicative of national payment-source patterns.

Besides providing lifetime estimates of these national payment-source patterns, we adjust for an inaccurate picture of underlying payment sources that can be created by Medicare financing. Because Medicare is a short-term benefit, including Medicare as a payer can provide a somewhat misleading picture of lifetime patterns of payment for nursing home care. For example, a person who receives 20 days of nursing home care under Medicare then pays privately for 1 year before becoming eligible for Medicare benefits would not be observed to have spent down assets if the year of private payment between Medicare and Medicaid is ignored. Thus, the presence of Medicare benefits can have the effect of masking whether an individual begins as a private payer or is eligible for Medicaid at first admission to a nursing home. In this study, we adjust for this masking effect.

Specifically, we used previously unavailable data concerning nursing home use and payment sources over a person's lifetime to address five questions:

1. What are the lifetime payment-source patterns, including Medicaid asset spend-down, of elderly nursing home users?
2. To what extent does short-term Medicare financing distort information concerning lifetime payment-source patterns?
3. How do payment-source patterns vary among subgroups?

4. How do lifetime estimates of individuals' nursing home payment-source patterns compare with previous estimates based on single stays?

5. For a person turning 65 years of age, what is the projected risk of entering a nursing home eligible to receive Medicaid reimbursement or of spending down assets to gain Medicaid eligibility?

Data and Methods

This analysis uses a new data base that provides information concerning nursing home use and payment sources over the entire lifetime for a cohort constructed to be representative of persons who used nursing homes at some time during their lives. Data derived from the 1985 National Nursing Home Survey provide retrospective information concerning all episodes of nursing home care for persons discharged during the year. For the persons who died during the year this represents total lifetime use. Kemper and Murtaugh,¹⁵ who used the 1986 National Mortality Followback Survey—a nationally representative sample of decedents—to analyze lifetime use of nursing homes, found that 93% of elderly nursing home users use nursing homes sometime during their last year of life. Therefore, the elderly decedents among the sample of discharges represent the vast majority of elderly decedents who ever used a nursing home. By making some assumptions regarding the other 7% with use only before the last year of life, it is possible to select and re-weight a sample of discharges to represent all persons dying in 1985 who ever used a nursing home after 65 years of age.

Data

The data base was constructed from two components of the 1985 National Nursing Home Survey: 1) the Discharged Resident component, a nationally representative sample of discharges over the course of a year; and 2) the Next-of-Kin Followup,

*Farbstein et al¹¹ demonstrated that estimates of spend-down from a 1985 discharge cohort in Connecticut were twice as large when based on data for first admission instead of most recent admission.

which was conducted approximately 2 months after the end of the year. Both components of the survey are described by Hing et al.¹⁶

For the Discharged Resident component, nursing home personnel reported on a random sample of 6,017 discharges occurring in the 12 months preceding an interview with facility staff. (Although many individuals had multiple discharges during the year, only 40 persons had more than one discharge actually sampled—39 persons had two discharges, and 1 person had four discharges. Utilization data for each person were combined onto each discharge record. Because only one discharge per person had a next-of-kin record, the duplicates were eliminated when the two data files were merged.) The “sampled stay” associated with each selected discharge serves as the reference point for questions regarding prior and subsequent nursing home use, for the facilities and for next-of-kin respondents. Data collected from the facilities include dates and payment sources at admission and discharge for the sampled stay, but only dates for prior and subsequent stays at the sampled facility or other facilities, all based on facility records. Facilities also reported the names of potential respondents to the Next-of-Kin Followup survey.

Because facilities did not report payment sources for any stays other than the sampled stay, the discharge sample must be merged with the Next-of-Kin Followup survey to obtain payment sources for any stays other than the sampled stay. While others have analyzed the discharged resident survey,^{17,18} no one previously has combined the two surveys to obtain payment source data for prior and subsequent stays. After the facility interview, 4,800 next-of-kin respondents for the discharge sample were contacted by telephone and were asked to report dates and payment sources for nursing home stays before and after the sampled stay, beginning with the first admission in the subject's life. Thus, between them the two surveys provide

a complete history of nursing home use and payment sources up to the date of the next-of-kin interview.[†]

Sample Selection and Reweighting

Constructing a data base from the combined surveys that properly represents persons dying during the year who used nursing homes after age 65 years requires adjustments to sample weights provided on the survey and appropriate sample selections. The first step was moving from a sample of discharges to a nationally representative sample of persons discharged during the course of 1 year. Merging the sample of discharges with the Next-of-Kin Followup Study yields the sample of 4,800 persons discharged with responses to the follow-up. For correct representation, the weights the National Center for Health Statistics constructed for the discharge sample were adjusted for differential selection probabilities of those with more than one discharge within the year (72% had only one discharge, 20% had two discharges, and 8% had three or more discharges) and for several types of nonresponse to the next-of-kin survey. After these adjustments, the sample represents all persons discharged from nursing homes during the survey year.

To obtain the cohort of elderly decedents needed for this analysis, a base sample of 2,489 persons who survived to 65 years of age, but who died at discharge or within a year of final discharge, was selected. After adjustment of the weights for differential

†Given that the nursing home experience covered the individual's lifetime, it is not surprising that there were missing dates, both for facility reported stays and for next-of-kin reported stays. There was, however, reassuring consistency between the two data sources for most of the sample. In all, approximately 17% of the final analysis sample was missing part or all of at least one date for an admission or discharge. The weighted sequential hot-deck methodology described below was used to impute the intervals of use for which a date was missing. Variables used in the matching process described the amount and patterns of use surrounding the intervals with missing dates.

time to follow-up survey, the sample represents all elderly persons using nursing homes during the last year of life, which, as indicated, have been estimated to account for 93% of elderly decedents during 1 year who ever used a nursing home.

The remaining estimated 7% of nursing home users who did not use nursing home services during their last year of life are represented among survivors in the full discharge sample, but they are not identifiable because of the relatively short follow-up period. To represent this group as well as possible, a sample of 237 persons who were alive as of the next-of-kin interview and were known to have been in the community at least 9 months after their most recent discharge were added to the base sample. This most recent discharge was assumed to be the final lifetime discharge. Weights were further adjusted to assure that this group of proxy decedents actually represented 7% of the total analysis sample of 2,726 decedents.

This strategy for representing the missing observations on persons with use only in the last year of life may introduce some error into the estimates of lifetime financing patterns. To the extent that some members of this 7% group were in fact re-admitted to nursing homes before death, the overall sample will over-represent persons who used nursing home services in their last year of life and under-represent persons who used nursing home services only before the last year of life. Given that these errors would occur only for a subset of the 7% of all nursing home users, the effects of any error are likely to be small. The underlying estimate that only 7% of all nursing home users have use only before the last year of life is, of course, also subject to error. As noted earlier, Kemper and Murtaugh¹⁵ based their estimates on next-of-kin respondents for a cohort of decedents. If next-of-kin under-report use occurring before the last year of life, the 7% would be an underestimate. If so, a comparison of financing patterns of the two groups using the data for the current

study suggests the estimates of the percent receiving Medicaid, both at admission and after spending down, would have a small upward bias. This is so because those who return to the community for an extended time are more likely to have remained private payers and less likely to have received Medicaid (not shown).

Payment Source Variables

The payment-source patterns reported in this study reflect the primary payer at first lifetime admission and final lifetime discharge. Thus, for example, spend-down in nursing homes is defined as being a private payer at first admission and receiving Medicaid at final lifetime discharge.[‡] Nearly 48% of the analysis sample had only a single stay represented by the sampled stay, so that admission and discharge primary payment sources were reported by the facility, based on records.[§]

The remaining 52% of the sample had nursing home use before or after the sampled stay (or both). Approximately 40% of the analysis sample had additional use only before the sampled stay, 5% had additional use only after the sampled stay, and 7% had use before and after the sampled stay. When use occurred before or after the sampled discharge, payment sources for the first admission or final discharge were taken from the next-of-kin interview if available. Because facilities reported payment sources only for the sampled stay, payment sources were never available from the facility for use before or after the sampled stay.

‡As in previous research, because income and assets are not measured directly in these data, the asset spend-down group includes persons who meet Medicaid asset requirements initially, but have too much income until a change in situation, such as losing pension income when a spouse dies, reduces income to eligible levels.

§Sampled-stay payment sources were imputed in 101 cases where the National Center for Health Statistics had imputed the payment sources or where logical edits did not appear to have been carried out as specified by the National Center for Health Statistics.

In all, 18% of the total analysis sample were missing only the first-ever admission payment source, 6% were missing only final discharge payment source, and 4% were missing both. More than half of those missing first admission payment source were persons whose prior use was entirely facility reported, and almost all of those missing final payment source were persons with subsequent stays reported only by the facility.

Missing items were imputed using a weighted sequential hot-deck imputation procedure. In this procedure, each case missing an item is assigned a value from a donor randomly selected from cases with reported data and with similar characteristics.^{19,20} The selection of matching donors and recipients was based on observed payment sources (the next observed payment source for first-ever admission and last prior payment source for final discharge), the length of time spent in nursing homes between the date for which payment source was to be imputed and the date of the observed payment sources, marital status, age at first-ever admission, and race.

Relative to estimates using only persons with complete reported data, estimates including the imputed cases show a slightly lower proportion of persons remaining private payers and slightly higher proportions entering and remaining Medicaid recipients and spending down to Medicaid eligibility. Because missing data are not random, the imputation using statistical matching based on characteristics related to payment source should result in lower nonresponse bias than if estimates were based only on fully reported cases.

Payment source information is somewhat different depending on whether it comes from the facility or a next-of-kin respondent. Next-of-kin respondents were asked to report only primary payers at each admission (who paid the most?) and all changes in primary payer during each stay. Thus, it is possible that Medicaid sometimes was not reported if the next-of-kin

respondent did not perceive it as the primary payer. This is possible because Medicaid pays only the difference between an eligible person's income and the Medicaid reimbursement rate and is not necessarily the primary payer.

Facilities were asked to report all payers and primary payer at admission and discharge from the sampled stay, and were asked to use records as their source of information. Therefore, for sampled stays, it was possible to identify when Medicaid was present as a payer, even when it was not reported to be the primary payer. In more than 92% of cases, if the facility reported that Medicaid was a payer at admission or discharge from the sampled stay, it also reported Medicaid as the primary payer. Thus, under-reporting of Medicaid by next-of-kin respondents may not be a serious problem. For the current study, the sampled stay primary payer was re-coded to be Medicaid in the small percentage of cases in which the sampled stay began or ended an episode of care and in which Medicaid was listed as a payer, but not as the primary payer.

To analyze the masking effect of Medicare, a second set of variables describing payment source other than Medicare at first admission and final discharge was created. After the re-coding, Medicare was the primary payment source at first admission only for those whose only payment source throughout was Medicare. Although uncommon, this can happen, for example, if a person had only short, post-hospital stays. When the first admission was reported by the next of kin, Medicare was re-coded to Medicaid, private, or other payer based on the next consecutive non-Medicare primary payer. When the first admission was the sampled stay, where concurrent payers were available, Medicare was re-coded to be private pay if private pay was present concurrently, other payer if private pay was not present but other payers were, and, again, to the next consecutive non-Medicare payer if no

other concurrent payer was present. Similar adjustments were made in reverse for payment source at final discharge.

For first admissions reported by the next of kin, this adjustment would underestimate asset spend-down and would overestimate the number of persons who were initially Medicaid recipients in cases where spend-down occurred due to cost sharing during the period when Medicare was primary payer. For first admissions occurring at the sampled stay, asset spend-down would be overestimated to the extent that some persons who meet Medicaid asset eligibility requirements do not meet income requirements until Medicare benefits run out.

Results

The primary payer at first admission and final discharge for elderly nursing home users is shown in Table 1. The top panel shows the estimates without adjustment for the masking effect of Medicare. Approximately half (50.7%) of nursing home users enter as private-pay residents. Of these 34.8% are private-pay residents at final discharge, 12.9% spend down their assets to become

eligible for Medicaid, and 3% end their stays while receiving Medicare reimbursement or other payment sources. The other half of nursing home users are made up of 26.9% who enter Medicaid eligible, 18% who enter with Medicare as their primary payer, and 4.5% with other primary payers such as charity care, uncompensated care, veterans benefits, or other public funds.

The lower panel of Table 1 shows the estimates based on payment source after re-classifying the nursing home users who began or ended their nursing home use receiving Medicare reimbursement to eliminate its potential masking effect. Comparing the top panel with the bottom panel, of the 20.8% of nursing home users who began or ended their use receiving Medicare benefits, approximately one fourth (5.5% of all users) had no payers other than Medicare. The largest effect of re-classifying the rest of those reporting Medicare is on estimates of the proportion relying on private payments. Nearly 60% of nursing home users are private payers at first admission when other payers are allowed to supersede Medicare, and 44.3% remain private payers throughout their time in nursing homes. The re-classification increases estimates of the proportion spend-

TABLE 1. Payment Source at First Nursing Home Admission and Final Discharge for Decedents 65 Years of Age or Older

Payer at First Admission	Total (%)	Payer at Final Discharge (%)			
		Private	Medicaid	Medicare	Other
Without Medicare adjustment					
All	100.0	40.9	42.6	12.6	3.9
Private	50.7	34.8	12.9	2.2	0.8
Medicaid	26.9	1.6	24.4	0.6	0.2
Medicare	18.0	4.1	4.0	9.7	0.1
Other	4.5	0.4	1.2	0.1	2.8
With Medicare adjustment					
All	100.0	46.8	43.1	5.5	4.6
Private	59.4	44.3	14.3	—	0.8
Medicaid	29.4	2.0	27.2	—	0.3
Medicare	5.5	—	—	5.5	—
Other	5.7	0.5	1.6	—	3.6

ing down from 12.9% to 14.3% of all nursing home users.

The Medicare re-coding makes little difference in the percent reporting Medicaid at admission or discharge, because the payment sources were coded initially to allow Medicaid to supersede Medicare in the 48% of cases in which use is limited to the sampled stay. Approximately 30% of nursing home users receive Medicaid when they first enter a nursing home. Nearly all of them continue to receive Medicaid throughout their stay in a nursing home. When those spending down and another 1.6% whose payment source changes to Medicaid are added, 43% of nursing home users ultimately receive Medicaid. Except where otherwise noted, remaining tables show estimates adjusted to eliminate the masking effect of Medicare.

Variation Across Subgroups

Patterns of payment sources by selected characteristics of elderly nursing home users are shown in Table 2. The full matrix of transitions in Table 1 has been condensed into four patterns: 1) beginning and ending as private payers; 2) beginning and ending on Medicaid; 3) spending down; and 4) all others. The final category includes persons who were receiving Medicare benefits throughout, other payers throughout (charity care, uncompensated care, veterans benefits, or other public funds), and uncommon patterns such as starting on Medicaid and ending as a private payer. (Intermediate transitions between the first and last payment source are ignored.)

Lifetime Use. There is a strong relationship between the amount of lifetime

TABLE 2. Distribution of Elderly Decedents Who Used Nursing Homes by Initial and Final Payment Source

	Number of Decedents	Distribution (%)			
		Private Throughout	Medicaid Throughout	Spendedown	Medicare or Other
All	492,007	44.3	27.2	14.3	14.2
Lifetime nursing use					
<3 months	159,807	56.5	17.3	2.7	23.5
3 to 6 months	50,404	53.5	24.3	10.5	11.7
6 months to 1 year	52,007	47.1	29.1	13.9	9.9
1 to 2 years	56,030	44.0	32.1	18.2	5.7
2 to 5 years	91,011	33.6	35.5	21.7	9.2
5 or more years	82,747	25.7	34.2	28.7	11.5
Sex					
Male	184,626	47.1	23.0	10.1	19.8
Female	307,382	42.7	29.7	16.8	10.8
Race					
Black	29,196	15.5	58.4	7.3	18.7
White or other	462,811	46.2	25.2	14.8	13.9
Marital status at discharge					
Married	116,165	53.4	18.6	9.1	18.9
Widowed	308,389	42.1	29.5	17.3	11.1
Never married	48,325	40.9	30.7	7.7	20.7
Divorced or separated	19,128	33.7	32.7	14.6	19.0

nursing home use and payment-source patterns. Not surprisingly, the greater the total lifetime use, the more likely a person was to spend down to Medicaid and the less likely to remain a private payer throughout. Only 2.7% of those who used less than 3 months of nursing home care spent down to Medicaid eligibility, compared with 28.7% of those who remained in nursing homes 5 years or longer. The proportion starting and ending as private-pay residents decreases from 56.5% for those with total use less than 3 months to 25.7% for those using 5 or more years of care.

Initial entry as a Medicaid resident does not appear to be related to total time in nursing homes, except for those in nursing homes less than 3 months. They were somewhat less likely to receive Medicaid benefits on admission to their first nursing home stay. The relatively large percentage of persons with less than 6 months of nursing home use reporting Medicare or other payment sources reflect the importance of Medicare as a payer for short, acute care-related use. Two thirds of those in the other payer group with less than 3 months of use and approximately one fourth of those with between 3 and 6 months of use reported Medicare as the primary payer throughout, compared with virtually none of those with more than 6 months of use (not shown).

Gender. Women were more likely than men to enter a nursing home initially as a Medicaid resident and to spend down assets. They also were less likely than men to remain private payers throughout their time

in nursing homes and were more likely than men (46.5% vs. 33.1%) to receive Medicaid reimbursement by final discharge.[¶] Men were nearly twice as likely as women to have Medicare or other payment sources, because of men's reliance on veterans benefits and because more men received Medicare benefits throughout (not shown).

Race. Approximately three fifths of black nursing home users received Medicaid benefits throughout compared with only one fourth of whites and others. A smaller proportion of all black nursing home users become eligible for Medicaid by spending down assets than whites and others (7.3% versus 14.8%). However, among those who entered as private payers, blacks were more likely to spend down than were whites. Only 15.5% of blacks were private payers throughout compared with 46.2% of whites and others, and approximately one third of blacks beginning as private payers eventually spent down, compared with approximately one fourth of whites.

Marital Status. Those who were married when discharged^{||} were less likely than those who were not married to receive Medicaid when first admitted or to spend down assets. When those who remained private pay and those who spent down are considered together, similar proportions of married persons and widows entered as private payers (62.5% and 59.4%, respectively). However, when those who entered the nursing home eligible to receive Medicaid reimbursement and those who spent down

[¶]Because payment-source patterns differed so greatly by total lifetime use, results also were adjusted for differential lengths of time in nursing homes for the groups compared. These differences are marked, with men, blacks, and those married at death more likely to have very short lifetime use and less likely to have very long use. However, with one exception, the results held even after the adjustment (not shown). The exception is that when estimates are adjusted, men and women are equally likely to enter and remain private payers. The standardization for differences in the distribution of lifetime use was done by re-weighting each subgroup to match the weighted distribution of lifetime use for the whole sample.

The distribution of total lifetime use by characteristics and the adjusted estimates are available from the authors on request.

^{||}Marital status actually is measured at discharge from the sampled stay, which is a good approximation of marital status at final lifetime discharge. The sampled-stay discharge is the final discharge for 88% of the sample. Final discharge was within 6 months of the sampled stay for another 10% of the sample, and within 11 months for the remaining 2%. (For the 7% of the sample representing persons with no use in the last year of life, who are included in the tabulations above, the last observed use was assumed to be the final episode in life.)

are considered together, only 27.7% of married persons were receiving Medicaid by their final discharge, compared with 46.8% of widows, 38.4% of those who never married, and 47.3% of those who were divorced or separated. Those who never married and those who were divorced or separated were less likely than married persons and widows to begin as private payers.

Impact of Knowing Lifetime Use and Payment Sources

Previous studies using national data to examine asset spend-down and other payment-source patterns from the individual perspective have been based on single nursing home stays rather than on lifetime use. Estimates based on stays and lifetime use differ in two respects, both of which would tend to result in higher lifetime estimates of asset spend-down and lower lifetime estimates of private pay and Medicaid throughout: 1) the period over which payment changes are measured (single stays versus the entire lifetime); and 2) the analysis sample (persons discharged during a year versus persons dying during 1 year who ever used nursing homes).

Examining payment-source patterns over a lifetime captures transitions that would be missed with a single stay. Thus, for example, a person with a spend-down stay followed by a stay that is Medicaid reimbursed

throughout would be correctly classified as spend-down in the lifetime data, but as spend-down or Medicaid throughout in the stay data, depending on which stay was sampled. Similar measurement problems would occur for a person with a privately paid stay followed by a spend-down stay. Thus, stay data can be expected to overestimate the percent Medicaid throughout and the percent private pay throughout and underestimate the percent spending down. The other less common patterns, combined as Medicare and other, could be underestimated by stay data for similar reasons.

The analysis sample affects the estimates because short stayers have a larger representation in a sample of persons discharged relative to a sample of persons who used a nursing home sometime during their life. Because payment patterns, and particularly asset spend-down, are related to length of stay, greater representation of short stays can affect the estimates.

The effect of having lifetime data can be seen in Table 3, which compares unadjusted and Medicare-adjusted payment-source patterns for single stays and lifetime use. The single-stay estimates are based on payment sources for the sampled stay using the sample representing persons discharged in a year (see re-weighting discussion above). Using lifetime data on nursing home use and the sample of decedents makes a large

TABLE 3. Single-Stay versus Lifetime Estimates of Payment Source Patterns

	All Medicare Included (%)		Adjusted for Medicare (%)	
	Single Stay	Lifetime Use	Single Stay	Lifetime Use
Distribution of all users				
Private throughout	37.8	34.8	46.5	44.3
Medicaid throughout	34.4	24.4	35.8	27.2
Spenddown	4.8	12.9	5.5	14.3
Medicare and other	23.0	27.9	12.2	14.2
Total	100.0	100.0	100.0	100.0
Spenddown as % of				
Private pay at admission	11.1	25.5	10.5	24.1
Medicaid at discharge	11.5	30.3	13.2	33.3

difference in the estimates. Comparing the adjusted estimates (findings for the unadjusted estimates are similar), as expected, the proportions private pay throughout and Medicaid throughout are smaller for the lifetime estimates than for the single stay estimates (44.3% vs. 46.5% private pay throughout and 27.2% vs. 35.8% for Medicaid throughout). The Medicare and other category also is larger for the lifetime estimates, as expected. The most striking difference, however, is in the spend-down estimate. The proportion of all nursing home users spending down over a lifetime is 2.5 times as large as the single-stay estimate—14.3% versus 5.5%. Similar relative increases are seen for two other measures of spend-down used in previous research. The percent of persons entering as private payers who spent down increases from 10.5% for a single stay to 24.1% for lifetime use. The percent of persons ultimately on Medicaid who began as private payers, an indication of the extent to which the program's institutional beneficiaries are persons who were not originally part of the welfare population as conventionally defined, increases from 13.2% for a single stay to 33.3% over a lifetime.

Comparison With Previous Research

Previous national estimates of payment-source patterns from an individual's perspective^{17,18} have found smaller proportions of patients spending down assets and higher proportions using Medicaid and private-pay sources throughout, consistent with their use of data for single stays. For example, using single-stay data from the 1985 National Nursing Home Survey, Spence and Wiener¹⁷ estimated that 36% of persons discharged were private-pay residents throughout, 34% received Medicaid reimbursement throughout, and 4% spent down. These estimates are quite similar to the unadjusted single-stay estimates based on the same survey in Table 3. The small differences may be caused

by different methods used to adjust probabilities of selection for those with multiple discharges during the year, differences in data cleaning and imputation, or the exclusion of and re-weighting for those with no next-of-kin data.

Other studies addressing payment patterns from an individual's perspective are difficult to compare with national estimates because they are based on data for a single state,^{12–14,21,22} and in one case, are based on a restricted sample from a group of states.²³ As an example of the difficulty in comparing estimates from national versus single-state data, estimates by Arling et al²² are roughly comparable in design to the single-stay national estimates for a discharge sample in the first column of Table 3, but are nearly identical to the lifetime estimates in the second column of Table 3. The inference, based on the relationship between single-stay and lifetime estimates demonstrated here, is that lifetime spend-down for residents of Wisconsin must be significantly higher than the national average. Conversely, three of the single-state studies^{12–14} use Connecticut data regarding admission cohorts for 8 or 9 years and statistical methods to produce lifetime spend-down estimates. The estimates from all of these studies are comparable in magnitude to those reported here, suggesting that Connecticut's spend-down experience is very similar to the national average.

Other studies of payment patterns have used samples of nursing home users at one point and are not appropriate to compare with lifetime estimates because of differences in the samples analyzed.^{14,17,22,24–28} For example, the lifetime estimate that 43% of nursing home users ultimately receive Medicaid is significantly less than Short et al's²⁴ estimate that 61% of nursing home residents receive Medicaid payments. This difference is most likely due to greater representation of long stayers, who are more likely to receive Medicaid, in a

sample of residents relative to a sample of persons who ever used a nursing home.[#] In addition, use by current residents is by definition truncated before the end of lifetime use and may be truncated at the beginning as well, depending on how much data regarding prior use are available. As Short et al²⁴ point out, such cross-sectional estimates are useful for addressing the implications of payment-source patterns for Medicaid budgets, but not for individuals.

Projected Spend-Down in Nursing Homes

The previous sections examined the historical experience of elderly decedents who used nursing homes after reaching 65 years of age. The analysis in this section shifts from historical experience to projections of expected future nursing home use and payment sources for all persons, users and nonusers combined. The analysis addresses questions such as, what is the likelihood that a person turning 65 years of age will be in a nursing home receiving Medicaid reimbursement before death? The answer depends on the probability of using a nursing home and the probability of receiving Medicaid reimbursement at admission or spending down for those who do use nursing homes.

The proportion of persons surviving to 65 years of age who use nursing homes was estimated using the lifetime estimate of the number of decedents who used nursing homes as the numerator and National Center for Health Statistics estimates of the total number of persons dying at 65 years of age or older as the denominator. To make projections, the historical data were adjusted for improvements in life expectancy using methodology from Murtaugh, Kemper, and

Spillman.²⁹ This involved re-weighting the historical sample to match Social Security Administration estimates of life expectancy for persons 65 years of age in 1995 by gender and age at death. The resulting estimates project nursing home use and financing patterns of the cohort of persons turning 65 years of age in 1995, assuming historical patterns of nursing home use and financing.

As seen in Table 4, an individual turning 65 years of age in 1995 has a 39.3% chance of eventually entering a nursing home. The risk of spending down to Medicaid eligibility in a nursing home is relatively small—only 6.3%. When that risk is combined with the risk of entering and remaining a Medicaid recipient, however, 17% of 65-year-old persons can expect to receive Medicaid reimbursement for nursing home care if historical payment-source patterns were to continue in the future. This is virtually identical to the likelihood of entering a nursing home and remaining a private payer throughout. Only 5.1% are projected to use nursing home care under Medicare or other public programs.

Men and women face dramatically different risks. Women are more likely to use nursing homes, to spend down, and to enter a nursing home already eligible for Medicaid benefits. Approximately half of women can expect to stay in a nursing home; approximately one tenth of women will spend down, and more than one fifth of women will be Medicaid recipients by their final discharge. In contrast, only 10.6% of men will receive Medicaid reimbursement by final discharge, and only one third of those—3.6% of all men turning 65 years of age in 1995—will spend down. This is because men face a smaller risk of ever entering a nursing home (less than one in three) and because a smaller proportion of men who use nursing homes receive Medicaid benefits at admission or spend-down.

When all persons 65 years of age are considered, black and white people face virtu-

[#]Kemper and Murtaugh¹⁵ found that during a lifetime, 30% of nursing home users had total use less than 3 months, and 51% less than 1 year. Only 10% of the cross section of current residents examined in Short et al had been in the nursing home less than 3 months in their current episode, and approximately 30%, less than 1 year.

TABLE 4. Projected Nursing Home Use and Payment Source Patterns for Persons 65 Years of Age in 1995

	All Payment Sources (%)	Private Throughout (%)	Medicaid (%)			Medicare Only or Other (%)
			Throughout	Spenddown	Total	
All elderly decedents	39.3	17.2	10.7	6.3	17.0	5.1
Sex						
Male	30.5	14.1	7.0	3.6	10.6	5.8
Female	46.9	19.8	13.9	8.7	22.6	4.5
Race						
Black	25.6	3.9	14.7	2.6	17.2	4.5
White or other	40.5	18.4	10.3	6.7	17.0	5.1

The percent of the elderly using nursing homes reported in the first column is estimated for each category by dividing the projected number of persons turning 65 years of age in 1995 who will use nursing homes, based on the NNHS, by the projected total number of persons turning 65 in 1995. The numbers in the remaining columns are the product of this percentage and the percent of NNHS nursing home users having each payment pattern.

ally the same risk of ending up in a nursing home on Medicaid. This is because, although black nursing home users are far more likely to receive Medicaid benefits, blacks are much less likely ever to use a nursing home (25.6% versus 40.5% of whites). The likelihood that a black person enters a nursing home as a private payer and remains private pay or spends down remains much smaller than for whites (3.9% and 2.6% for blacks versus 18.4% and 6.7% for whites).

Conclusion

This paper has presented national estimates of nursing home payment-source patterns over a person's lifetime. Forty-four percent of elderly nursing home users started and ended as private-pay residents; 14% began as private payers and then spent down assets to become eligible for Medicaid reimbursement; and 27% received Medicaid reimbursement throughout their nursing home use. The remainder have their care paid exclusively by Medicare or other payers or have other patterns of transitions among payers.

For the entire elderly population, including both users and nonusers of nurs-

ing homes, the projected risk of spending down assets in nursing homes is, of course, even lower. Of those turning 65 years of age in 1995, approximately 6% would be expected to enter a nursing home as private payers and ultimately receive Medicaid assistance under the asset standards in effect before the 1988 changes in the law. At least as important for policy as spending down is that 17% of 65-year-old persons can expect to receive Medicaid reimbursement for nursing home care. Of those, more than three fifths (62%) will have entered the nursing home already eligible for Medicaid benefits.

The analysis demonstrated the importance of having data on lifetime use rather than the single stays on which previous research have been based. For example, the proportion spending down assets is 2.5 times greater using lifetime data. The analysis also demonstrated the confounding effect of Medicare, which can mask underlying payment-source patterns. For example, re-classifying those receiving Medicare as paying privately, receiving Medicaid benefits, or having other payers increases the percent private pay throughout by approximately 25%.

Limitations

The estimates presented here have several limitations that should be noted. Most evident, the estimates of lifetime nursing home payment-source patterns are based on historical data, even when the data are re-weighted to reflect increased life expectancy. If income and assets are higher relative to nursing home costs in the future, the proportion relying entirely on private resources will be higher, and the proportion spending down will be lower, all else equal. Other changes that affect the demand for and supply of nursing home care also could affect the mix of individuals in nursing homes, and hence, their payment-source patterns.

Of particular importance is that the 1985 data used in this study predate the new rules raising the amount of income and assets protected for community spouses of Medicaid recipients in nursing homes. Protected income was increased to a minimum of 150% of poverty as of July 1992 and a maximum of \$1,700 per month, at state discretion. Protected assets were increased to a minimum of \$13,740 and, at state discretion, up to \$68,700 in 1992 (replacing the previous limit of approximately \$3,000 for a married couple).²

The new rules will increase the number of married persons qualifying for Medicaid by increasing the number already eligible at nursing home entry and the number of the remaining private payers who spend down, but this is likely to be a relatively small effect among all users. Only approximately one fourth of nursing home users are married at the end of their use, and nearly one third of married users already enter on Medicaid or spend down.**

**The spousal protection changes also have the potential to reduce the number of widows of institutionalized persons ultimately qualifying for Medicaid by improving their financial situation. Again, this effect is likely to be small because most nursing home users are not married. Finally, easier access to Medicaid could increase the number of married persons entering nursing homes. Other work in progress by the author suggests, however, that even among those eligible for Medicaid, those who are married are only approximately two-thirds as likely as those who are unmarried to be in nursing homes.

Another qualification to the results presented here is that a so-far unknown percent of the elderly spend down assets outside of nursing homes. Medicaid eligibility among those who never use nursing homes is not reflected in the data used here. Those who use nursing homes but spend down before their first admission would be observed in this study as Medicaid recipients on first entry. No national studies conducted thus far have been able to estimate the rate of spend-down before nursing home admission among those eventually using nursing homes or the rate of spend-down among those who never enter a nursing home.††

Finally, although there is no strong empirical evidence, some believe that the ability to spend down and have the public sector pay for nursing home care has encouraged artificial "impoverishment" through transfer of assets to heirs.³⁰ If, as some argue, such Medicaid estate planning is a relatively new and growing phenomenon, then the data used in this analysis could understate current rates of admission for persons already eligible for Medicaid reimbursement and rates of spend-down.‡‡

††Liu, Doty, and Manton¹⁸ used the 1982–1984 National Long Term Care Survey to analyze conversions to Medicaid in the community, but their sample—elderly persons already known to be disabled who did not use a nursing home during the 2 years covered by the survey—is not generalizable to lifetime experience among all elderly persons. In their study, approximately 6% of those who did not use nursing homes became Medicaid eligible in the community, compared with approximately 31% of those who used nursing homes during the interval. Despite the smaller percent becoming eligible, the community spend-down group actually represented 61% of the total spending down because those not using nursing homes significantly outnumbered nursing home users. A similar finding was reported by Tempkin-Greener et al.²¹ for all elderly residents of Monroe County, New York, over a 3-year period.

‡‡However, new provisions in the Omnibus Budget Reconciliation Act of 1993 may stop or reduce future growth. These provisions significantly tighten restrictions on asset transfers and other arrangements to shelter assets from being counted in determination of Medicaid eligibility and increase the likelihood that benefits will be recovered from the estates of recipients or their beneficiaries.

Implications for Policy

Despite these inevitable uncertainties, the payment-source patterns reported here suggest that although previous national estimates have understated the percent spending down assets in nursing homes, for the elderly population as a whole, and even nursing home users, the risk is not large. That a relatively small share of the elderly spend down in nursing homes does not mean, however, that asset spend-down should be of no concern to individuals or should be ignored by policy makers. Despite the low risk, many elderly persons face that risk—most of the 60% of nursing home users who enter as private payers and most of those who turn out never to need nursing home care. Only the very wealthy and those who already are eligible for Medicaid have no risk of spending down. Thus, although only 14% of nursing home users will spend down, and therefore, would be in a position to realize asset protection through such programs as the Robert Wood Johnson Foundation's Public-Private Partnerships, a much larger proportion of the elderly could benefit indirectly from this or other public or private policies aimed at the spend-down group.

The evidence presented here demonstrates that far larger proportions of nursing home users remain private payers or enter nursing homes already eligible for Medicaid reimbursement than those who spend down. Thus, there would seem to be no argument in terms of numbers affected or level of hardship for focusing policy on preventing asset spend-down rather than on the larger questions of whether the elderly can afford needed long-term-care services and what are appropriate policy responses.

Clearly those who spend down assets in nursing homes, those entering nursing homes already Medicaid eligible (in some cases having spent down in the community), and the unobserved number of elderly who receive Medicaid but never enter nursing homes are not able to afford the long-term care they need. For those who cannot afford to pay for their

own care, other charges in Medicaid or other public program design and implementation are the appropriate policy concern. For example, alternative reimbursement policies or coverage of personal care homes might affect access to care and may improve service delivery for this group. For those who now meet Medicaid eligibility criteria only if they enter nursing homes, increased coverage of home care, including making community eligibility rules the same as those for nursing home care, also could provide more choice over site of care.

Finally, the results presented here also demonstrate that different policy aims affect different groups differentially. The large differences in payment-source patterns between blacks and whites provide a dramatic example. Because blacks are less likely to enter nursing homes and more likely to already be Medicaid eligible if they do enter, they are especially likely to be affected by changes in benefits within the Medicaid program. Blacks are especially unlikely to be affected by policies aimed narrowly at preventing asset spend-down.

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