

March 2013

Medicaid Spend Down: New Estimates and Implications for Long- Term Services and Supports Financing Reform

Final Report

Prepared for

The SCAN Foundation
3800 Kilroy Airport Way
Suite 400
Long Beach, CA 90814

Prepared by

Joshua M. Wiener, PhD
Wayne L. Anderson, PhD
Galina Khatutsky, MS
Yevgeniya Kaganova, PhD
Janet O’Keeffe, DrPH
RTI International
701 13th Street, NW, Suite 750
Washington, DC 20005



RTI Project Number 0213025.000.001

RTI Project Number
0213025.000.001

Medicaid Spend Down: New Estimates and Implications for Long-Term Services and Supports Financing Reform

Final Report

March 2013

Prepared for

The SCAN Foundation
3800 Kilroy Airport Way
Suite 400
Long Beach, CA 90814

Prepared by

Joshua M. Wiener, PhD
Wayne Anderson, PhD
Galina Khatutsky, MS
Yevgeniya Kaganova, PhD
Janet O'Keefe, DrPH
RTI International
3040 Cornwallis Road
Research Triangle Park, NC 27709

Contents

Section	Page
Acknowledgements	vii
Executive Summary	1
1 Introduction and Background	1
1.1 Introduction	1
1.2 Background.....	3
1.3 The Financial Status of Older People and the Cost of Long-Term Services and Supports	3
1.4 Medicaid Eligibility Standards	5
1.5 Research on Spend Down	7
2 Research Questions	11
3 Data and Methods	13
3.1 Data Sources	13
3.2 Study Population and Sample Size	14
3.2.1 Medicaid Eligibility	15
3.2.2 Medicaid Spend Down	16
3.2.3 Use of Long-Term Services and Supports.....	18
3.3 Methods	19

4	Results	21
4.1	Research Question #1. What is the prevalence of Medicaid spend down among people aged 65 and older? What is the prevalence for people under age 65? What happens to the assets of people aged 65 and older as they grow older? What happens to the home when people start using nursing home services?	21
4.2	Research Question #2. How does Medicaid spend down differ between people in the community and those residing in a nursing home? Do more people spend down in the community or in nursing homes?	22
4.2	Research Question #3. Among those who spend down after they start using long-term services and supports, what is the length of time it takes to spend down to Medicaid eligibility? Does this differ by spend down in the community versus the nursing home?	24
4.4	Research Question #4. What are the socio-demographic and financial characteristics and service utilization patterns of those who spend down to Medicaid eligibility versus those who do not spend down? Do the characteristics of people who spend down differ in the two settings?	28
4.4.1	Demographic Characteristics	31
4.4.2	Insurance Coverage	31
4.4.3	Health and Functional Status.....	31
4.4.4	Income and Wealth.....	32
4.4.5	Wealth Transfers	40
4.4.6	Spend Down by Use of Long-Term Services and Supports	41
4.5	Research Question #5. Are people who spend down to Medicaid eligibility in the community more likely to enter a nursing home than those who do not spend down?.....	45
5	Conclusions	47
	References	R-1

Figures

Number	Page
3-1. Three Measures of Medicaid Spend Down	17
4-1. Median Income (Respondent and Spouse)	38
4-2. Total Median Wealth Less IRA	39
4-3. Median Net Value of House (Primary Residence)	39
4-4. Median Net Value of Non-Housing Wealth	40

Tables

Number	Page
1-1. Income and Asset Requirements and Benefits for Medicare Savings Programs	7
4-1. Medicaid Spend Down, by Age	22
4-2. Medicaid Spend Down, by Use of Long-Term Services during Study Period (1996/1998–2008)	23
4-3. Average Number of Years to Spend Down, by Use of Long-Term Services and Supports	25
4-4. Multivariate Models of Time to Spend Down, by Use of Long-Term Services and Supports	27
4-5. Demographic and Health Status Characteristics at Baseline of Different Cohorts, by Spend Down Status	29
4-6. Income and Wealth Characteristics of the Three Study Cohorts at Baseline, by Spend Down Status.....	35
4-7. Income and Assets Distribution of Non-Medicaid Population at Baseline, by Age and Spend Down Status	36
4-8. Spend-Down Population Income and Assets by Use of Long-Term Services and Supports, by Quartiles	37
4-9. Transfer of Assets in 1996/1998 by Non-Medicaid Population (Cohort 1), by Age and Spend Down Status	41
4-10. 1996/1998 Baseline Characteristics of the Spend-Down Population, by Use of Long-Term Services and Supports	42
4-11. Comparison of Nursing Home Use by Spend Down Status in Community	45

Acknowledgements

The authors gratefully acknowledge funding by The SCAN Foundation. The final report benefited greatly from comments from Gretchen Alkema, PhD, and Lisa Shugarman, PhD, of The SCAN Foundation and Anne Tumlinson and Eric Hammelman of Avalere Health. The views expressed in this report are those of the authors and are not necessarily those of The SCAN Foundation or RTI International.

Executive Summary

Medicaid provides an important safety net for people who are poor or become poor, either because of the high costs of health and long-term services and supports, or for other reasons. The transition from non-Medicaid to Medicaid status can be difficult, especially since it is often associated with illness, disability, and declining income and assets. The high cost of long-term services and supports results in catastrophic out-of-pocket costs for many people needing services, some of whom spend down to Medicaid. For people who have been independent all of their lives, transitioning to Medicaid means depending on a means-tested welfare program for their health and long-term services and supports. Moreover, spending for people transitioning to Medicaid is a substantial portion of state Medicaid expenditures.

This study examines transitions to Medicaid eligibility or Medicaid spend down by people age 50 and older over a 12-year period. Data for this study come from the 1996 to 2008 waves of the Health and Retirement Study, which has been merged with Medicare data to help establish Medicaid eligibility.

The key findings from this study are as follows:

- **Over the 10-year observation period, almost 10 percent of the previously non-Medicaid population age 50 and over spent down to Medicaid eligibility.** Thus, Medicaid spend down is not a rare event. Moreover, among Medicaid beneficiaries of this age group, almost two-thirds became eligible after spending down to Medicaid eligibility. This spend-down population includes nondisabled people under age 65 with low income and assets who were initially ineligible for Medicaid and who became Medicaid eligible after age 65 due to the change in Medicaid eligibility requirements, but did not actually deplete their assets.

- **About half of people who spent down to Medicaid eligibility did not use any long-term services and supports.** Fully 46.1 percent of people who spent down did not use any long-term services and supports, 7.1 percent used only personal care, 33.1 percent used only nursing home care and about 13.7 percent used both personal care and nursing home care. The non-LTSS spend-down population may have become impoverished because of high out-of-pocket medical care costs, reductions in income due to pension limitations, or other factors related to everyday living (e.g., need to buy a new car or replace the furnace).
- **At least one-fifth of long-term services and supports users who spent down to Medicaid eligibility were community residents using personal care services.** Among people using long-term services and supports, most policy makers and researchers have focused on spend down in nursing homes. While most people using long-term services and supports who spent down used nursing home care, paid personal care is associated with Medicaid spend down in a significant minority of cases.
- **People who spend down are disproportionately lower income and have substantially fewer assets than people who do not spend down.** People who spend down are disproportionately Black, Hispanic, unmarried, and have lower levels of education, all characteristics associated with lower levels of income and assets. This finding is inconsistent with the common assumption that the income and assets of people who spend down are typical of the population as a whole and that people who spend down are predominantly middle class. While the income and assets of people who do not spend down increase over time, the income and assets of people who spend down decline or are, at best, stable over time. Moreover, among people who spend down, few are asset rich and income poor. Because of the low levels of income and assets among people who spend down, they are unlikely to be purchasers of private long-term care insurance or to participate in other private-sector initiatives requiring substantial financial investment.
- **The rate of asset transfer among those who spent down to Medicaid eligibility was almost half that of those who did not spend down.** One of the most controversial aspects of financing for long-term services and supports is the extent to which people transfer their assets in order to appear artificially poor so that they

can qualify for Medicaid. While a full-scale analysis of transfer of assets is beyond the scope of this study, in 1996 approximately one-quarter of people who spent down transferred more than \$500 in assets to their children over the prior two years, compared to 47 percent of people who *did not* spend down. A slightly higher percentage of people who spend down transferred their houses to their children than did people who did not spend down, but the proportions were very small.

- **Among respondents followed over the study period, the average time to spend down was 6.8 years.** Multivariate analyses did not find strong and consistently significant variation in time to spend down by categories of long-term services and supports use. Variables predicting a shorter time to spend down include lower income, lower home value, increasing age, fair or poor health, and a higher number of chronic conditions.

The data in this report suggest that many typical assumptions about long-term services and supports and aging policy, more generally, need to be rethought. First, current policy initiatives in long-term services and supports focus on rebalancing the delivery system, largely ignoring the financing system that makes catastrophic out-of-pocket expenses for people who use services routine, forcing them onto welfare in the form of Medicaid. This study demonstrates that Medicaid spend down is something that happens to a significant number of people as they age. It is not a rare circumstance that only a few people experience.

Second, Medicaid spend down is part of a larger issue reflecting the inadequacies of our retirement security system and is not just an issue of long-term services and supports. The large proportion of people who spend down and who do not use long-term services and supports deserves additional analysis, but is likely the result of inadequate protection against out-of-pocket health care costs, pensions that are not indexed for inflation, job loss, and low Social Security benefits. Within long-term services and supports, spend down is an issue for people using home care and is not just an issue of use of nursing homes, as is commonly assumed.

Third, it has long been a strategy of many policymakers to promote private long-term care insurance with the expectation

that savings to Medicaid would follow. However, the income and assets of people who spend down are considerably lower than commonly assumed, casting doubt as to whether the spend-down population could be expected to purchase long-term care insurance without very deep subsidies. Thus, promoting private-sector long-term care insurance is unlikely to have more than a marginal impact on Medicaid expenditures for long-term services and supports without deep subsidies to enable much more moderate income people to purchase policies. The Medicaid spend-down population and the population who can afford unsubsidized private long-term care insurance have little overlap.

1

Introduction and Background

1.1 INTRODUCTION

Given the lack of private long-term care insurance and Medicare coverage for long-term services and supports, many people who were not originally poor transition to Medicaid eligibility—a process generally referred to as “spending down”—because they cannot afford the nursing home, home care, and residential care services that they need.

In fiscal year 2011, on an average monthly basis, 4.9 million people aged 65 and older and 9.6 million people under the age of 65 with disabilities were Medicaid beneficiaries (Centers for Medicare & Medicaid Services, 2011). Medicaid is a means-tested welfare program, and eligibility is limited to people who are poor or become poor after incurring high medical and long-term services and supports expenses, and who have very low levels of assets. Given the lack of private long-term care insurance and Medicare coverage for long-term services and supports, many people who were not originally poor transition to Medicaid eligibility—a process generally referred to as “spending down”—because they cannot afford the nursing home, home care, and residential care services that they need. They become poor and Medicaid-eligible because they spend almost all of their non-housing assets on health care or long-term services and supports (Wiener, Sullivan, and Skaggs, 1996). While the role of the costs of long-term services and supports has long been recognized as a cause of Medicaid spend down, other reasons why people transition to Medicaid have received much less attention by policy makers and researchers, including the costs of medical care and the general decline in income and assets as people age.

Thus, people who are unlucky enough to need long-term services and supports are financially devastated, while people who are lucky enough not to need long-term services and supports are able to retain their assets.

Although Medicaid's role as a safety net, especially for long-term services and supports, is critical, spend down creates at least three major problems. First, because of the high cost, some people impoverish themselves paying for long-term services and supports (Coe, 2007; Mehdizadeh, Nelson, and Applebaum, 2006; Waidmann and Liu, 2006; Wiener et al., 1996). Thus, people who are unlucky enough to need long-term services and supports are financially devastated, while people who are lucky enough not to need long-term services and supports are able to retain their assets. Second, many people who have been independent all of their lives find themselves dependent on a means-tested welfare program to help pay for their long-term services and supports and health care. Indeed, Medicaid is the main source of financing for long-term services and supports; almost two-thirds of nursing home residents rely on Medicaid to pay for their care (American Health Care Association, 2012). Third, Medicaid must pay not only for the services of people who have been poor for a long time, but also for people who became poor as they aged or had high out-of-pocket expenses for long-term services and supports and medical care. In 2010, Medicaid spent \$125.8 billion on long-term services and supports, an amount that is likely to rise with the aging of the population (Eiken, Sredl, Burwell et al., 2011; Johnson, Toohey, and Wiener, 2007).

Despite the centrality of spend down for policy regarding older people, Medicaid, and long-term services and supports, surprisingly little current research is available. Most studies are almost two decades old and cannot take into account the substantial changes that have taken place in the long-term services and supports delivery system over this period. This study provides current information about Medicaid spend down for the older population (age 50 and older) by analyzing the 1996 to 2008 Health and Retirement Study merged with Medicare data on Medicaid eligibility. This study estimates the incidence of Medicaid spend down, presents data on the characteristics of people who do and do not spend down, examines the amount of time needed to spend down, and analyzes the effect of use of long-term services and supports on Medicaid spend down. In addition to providing more current estimates than other available studies, a major contribution of this study is to include the community-based population in the

analyses, a group that is typically excluded from these analyses.

The rest of this report is organized into five sections. The remainder of this first section presents background on Medicaid spend down and reviews the literature. Following the background section is a list of the main research questions for the study. The third section is a description of the data and methods used in the study. The fourth section presents the results of our analyses, organized by research question. Finally, the report concludes with a discussion of the main findings of the study and their policy implications.

1.2 BACKGROUND

Medicaid eligibility requirements are complex. People are eligible for Medicaid when they have low income and few assets as measured by the program and meet the categorical eligibility requirements. Focusing on people who are late middle-age and older, the relevant categorical eligibility requirements are age (age 65 and older) and disability (usually assessed by meeting the disability requirements of Social Security Disability Insurance or the Supplemental Security Income program). Beneficiaries can be determined to be poor and have few assets in two ways—they can simply be poor and have few assets or they can use up their income and assets paying for medical and long-term care, a process referred to as “spending down.”

1.3 THE FINANCIAL STATUS OF OLDER PEOPLE AND THE COST OF LONG-TERM SERVICES AND SUPPORTS

While the financial status of late middle-aged and older people has improved over time, most people are not wealthy, especially people age 85 and older or those with disabilities who are most likely to use long-term services and supports.

Medicaid eligibility is a complex interaction of the income and assets of potential beneficiaries and their use of medical and long-term services and supports. Over the last 30 years, poverty among younger people increased, while it decreased among older people (Banarjee, 2012a). While the financial status of late middle-aged and older people has improved over time, most people are not wealthy, especially people age 85 and older or those with disabilities who are most likely to use long-term services and supports. Personal savings and pension account balances become depleted as people age. Defined benefit pensions are often not indexed for inflation, and Social Security benefits are reduced following the death of a spouse. Also, as people age, their medical expenditures increase

steadily, which can deplete assets and income (Banarjee, 2012b).

A substantial subset of people just above the federal poverty level are not Medicaid beneficiaries, but are vulnerable to reductions in income and assets that would make them eligible for Medicaid. In 2002, more than a quarter of frail older people had income below 125 percent of the federal poverty level, and more than half had incomes below 200 percent of the federal poverty level (Johnson and Wiener, 2006). In one analysis using the Health and Retirement Study, the poverty rate for people age 65 and older in 2009 was 10.5 percent, but it was 14.6 for people age 85 and older (Banarjee, 2012a). Moreover, the 20.9 percent of single women age 65 and older had income below the Federal Poverty Level in 2009.

Non-housing assets decline sharply with age, with people age 75 and older having less than half the median level of people age 65-69.

Moreover, the wealth of older people, especially people with disabilities, is quite modest. In 2010, median non-housing wealth for people age 65 and older was \$28,518; median home equity was \$135,000 among those with home equity (Gottschalck and Vornovitsky, 2012). Non-housing assets decline sharply with age, with people age 75 and older having less than half the median level of people age 65-69. Moreover, older people with disabilities have lower assets than people without disabilities. In 2002, frail older people had median household financial assets of \$23,587 and median net housing wealth of only \$56,956, roughly a third and half, respectively, of that of older people with no disabilities (Johnson and Wiener, 2006). Moreover, a recent analysis of the HRS finds that a substantial fraction of persons die with virtually no financial assets—46.1 percent with less than \$10,000—and many of these households also have no housing wealth and rely almost entirely on Social Security benefits for support (Poterba, Venti, and Wise, 2012).

A substantial research literature finds a correlation between health and wealth (Michaud and Soest, 2008; Smith, 1999, 2005; Wilkinson, 1996). In one study examining the population age 50 and over, 69.6 percent of people with income below the federal poverty level have suffered acute health conditions—defined as a diagnosis of cancer, lung disease, heart problems, or stroke—compared with 48.1 percent of those above the federal poverty level (Banarjee, 2012a).

In 2012, the national average annual price for a private room in a nursing home was \$90,520 and the average annual price for a private room in an assisted living facility was \$42,600.

People with chronic health conditions are more likely to develop disabilities, and people with disabilities are likely to use long-term services and supports, which are expensive. In 2012, the national average annual price for a private room in a nursing home was \$90,520 and the average annual price for a private room in an assisted living facility was \$42,600 (MetLife Mature Market Institute, 2012). Similarly, the average private-pay price for home health aide services from licensed agencies was \$21 per hour; the cost of a home health aide working a 4-hour shift 5 days a week would cost \$21,840 a year. Of persons who turned age 65 in 2005, it is estimated that 36 percent of those with out-of-pocket expenses for long-term services and supports will have expenditures exceeding \$25,000 and 10 percent will have expenditures exceeding \$100,000 (Kemper, Komisar, and Alecxih, 2005). As a result of these high costs, long-term services and supports are beyond the financial reach of many people and will cause them to spend down to Medicaid.

While the spend down literature focuses almost exclusively on long-term services and supports expenses, health insurance premiums and health care expenses not covered by Medicare can also contribute to a depletion of assets. It is estimated that a couple both age 65 in 2005 living to average life expectancy will need as much as \$295,000 to cover premiums for health insurance coverage and out-of-pocket expenses during retirement, not including long-term services and supports (Fronstin, 2006). Another study projected that the median ratio of out-of-pocket health spending to income for those 65 and older will rise gradually from 10 percent of income in 2010 to 15 percent of income in 2030 (Johnson and Mommaerts, 2010).

1.4 MEDICAID ELIGIBILITY STANDARDS

To be eligible for Medicaid, individuals must have both a low income and few assets (Walker and Accius, 2010). Although Medicaid financial eligibility criteria vary by state, aged, blind, or disabled individuals living in the community generally must have an income no higher than the federal poverty level, which was \$11,170 in 2012, or else lower than or equal to the Supplemental Security Income payment level, \$8,386 in 2012. People less than 65 years of age are considered disabled in most states if they meet the requirements for receipt of Supplemental Security Income or Social Security Disability Insurance. For these programs, disability means having a

medically determinable physical or mental impairment which results in the inability to do any substantial gainful activity, and can be expected to result in death or has lasted or can be expected to last for a continuous period of not less than 12 months.

Medicaid's income eligibility rules for nursing home residents are more generous than for individuals in the community. Most states have medically needy programs, which provide Medicaid eligibility for people whose incomes exceed the cost of their nursing home care, as long as they meet the asset requirements. For people in states without a medically needy program, individuals in nursing homes may be eligible for Medicaid if their income does not exceed 300 percent of the Supplemental Security Income payment level—\$25,158 in 2012. Because Medicaid home and community-based services waivers are designed to substitute for institutional care, most states use this higher institutional eligibility standard to determine eligibility for waiver services (Ng, Wong, and Harrington, 2012; O'Keeffe, Saucier, Jackson et al., 2010).

Before Medicaid will cover nursing home costs, residents must use all of their income to pay toward the cost of care, except for a small personal needs allowance, which is generally \$30 to \$40 per month. Medicaid pays the balance using Medicaid reimbursement rates. Medicaid rules protect the financial status of community-based spouses of nursing home residents, allowing the spouse to keep a substantial portion of the income of the institutionalized spouse. State requirements vary in terms of the amount individuals receiving services through Medicaid Home and Community-Based Services waivers must contribute to the cost of their care; some states require cost sharing in varying amounts and some do not.

In addition to income requirements, potential Medicaid beneficiaries must meet an asset test. Although there is some variation across states, most states allow single individuals to retain only about \$2,000 in financial assets, excluding an individual's home and personal effects, which for many people is their main asset. This asset level has not increased since the mid-1980s. Real or rental property that generates income needed for self-support is not counted as an asset. The Deficit Reduction Act of 2005 limited the amount of exempted assets to a fixed amount, which was \$525,000, or \$786,000 at state

option in 2012. As with income, the assets of married couples are divided in a way to prevent community-based spouses of nursing home residents from being impoverished.

In addition to financial eligibility for the full array of Medicaid benefits, people may also be eligible for Medicare Savings Programs, which provide Medicaid financial support for Medicare premiums, deductibles, and coinsurance (**Table 1-1**). These benefits are means-tested but provide some Medicaid support to people whose income and assets are above normal Medicaid levels.

Table 1-1. Income and Asset Requirements and Benefits for Medicare Savings Programs

Program	2012 Monthly Income Limits (Individuals/Couples)	2012 Assets Limits (Individuals/Couples)	Benefits
Qualified Medicare Beneficiary (QMB)	<100% of Federal Poverty Level (\$951/\$1281)	\$6,940/\$10,410	Medicare Part A and B premiums, deductibles and coinsurance
Specified Low-Income Beneficiary (SLMB)	100–120% of Federal Poverty Level (\$1,137/\$1,533)	\$6,940/\$10,410	Medicare Part B premium
Qualified Individual (QI)	120–135% of Federal Poverty Level (\$1,277/\$1,723)	\$6,940/\$10,410	Medicare Part B premium
Qualified Disabled and Working Individual (QDWI)	<200% of Federal Poverty Level (\$3,809/\$5,129)	\$4,000/\$6,000	Medicare Part A premium

Source: Centers for Medicare & Medicaid Services, 2012; Kaiser Family Foundation, 2010.

1.5 RESEARCH ON SPEND DOWN

Most available studies of Medicaid spend down rates are outdated (i.e., almost two decades old) and focused solely on nursing homes.

Although spend down is an important issue for policy makers concerned about growing Medicaid costs and people impoverishing themselves as they grow older, little current data on Medicaid spend down are available. Most available studies of Medicaid spend down rates are outdated (i.e., almost two decades old) and focused solely on nursing homes. Earlier research found that Medicaid spend-down rates varied widely depending on data source, state, measures used, and population studied:

- A 1984 study of Michigan nursing homes found that 27 percent of residents spent down to Medicaid (Burwell, Adams, and Meiners, 1990).

- A study using the 1982–84 National Long-Term Care Survey and 1985 National Nursing Home Survey found that about 10 percent of nursing home discharges of people admitted as private pay spent down to Medicaid eligibility (Liu et al., 1990). In contrast, over 50 percent of nursing home residents remain private pay throughout their stays. In a rare examination of spend down in the community, the study found that the number of disabled older people who spent down in the community exceeded the number who spent down in nursing homes.
- A 1992 review of older studies found that between one-fourth and one-third of nursing home residents spent down to Medicaid eligibility (Adams, Meiners, and Burwell, 1992).
- A study of a single for-profit nursing home chain in four states found that 19 percent of private pay residents spent down (Mor, Intrator, and Laliberte, 1993).
- A study of Medicaid spend down using data from the 1985 National Nursing Home Survey found that a third of all discharged nursing home residents admitted as private pay eventually spent down to Medicaid and that over a quarter of all discharged Medicaid residents were admitted as private pay (Wiener et al., 1996). About one-seventh of all discharged nursing home residents spent down to Medicaid at some point during their stay.
- A study in Monroe County, New York, reported that of people who entered nursing homes as private-pay residents, 27 percent spent down to Medicaid eligibility; 63 percent of these Medicaid beneficiaries had nursing home stays longer than 3 years (Temkin-Greener, Meiners, Petty et al., 1993).

Of the more recent estimates, one study found that among people age 70 or older in 1993 who were not Medicaid beneficiaries, 16 percent became Medicaid recipients by 2003 (Lee, Kim, and Tanenbaum, 2006). Another study found that among people admitted to nursing homes between 1998 and 2002, more than half were not Medicaid eligible prior to admission, although most became Medicaid eligible at the time—or within about 1 year—of admission (Waidmann and Liu, 2006).

An analysis of the nursing home Minimum Data Set for Ohio found that 64 percent of private-pay residents became eligible for Medicaid after 3 years in a nursing home. However, private-

pay residents did not spend down as rapidly as anticipated. For example, after a 9-month stay, 23 percent of private payers had converted to Medicaid: one-third by the end of the first year, and 55 percent after 2 years (Mehdizadeh et al., 2006). The authors note that the inverses of these percentages are equally important: after a 2-year stay in a nursing home, almost one-half of private-pay residents had not spent down, and after 3 years, one-third remained private pay.

The authors stress that these data were for private-pay residents who remained in the nursing home, but that the vast majority of private-pay admissions were for very short stays; after 1 year, only 24 percent of all individuals admitted as private-pay residents remained in the facility. Thus, even though 64 percent of those who began as private-pay residents were Medicaid eligible after 3 years, these residents account for only 5 percent of those who enter nursing homes as private-pay residents.

While this transfer of assets no doubt occurs, the empirical research on this topic finds that transfer of assets is relatively infrequent and usually involves quite small amounts of funds when it occurs (Bassett, 2004 ; Lee et al., 2006; Norton, 1995; O'Brien, 2005; Sloane and Shayne, 1993; Waidmann and Liu, 2006).

Some observers contend that the estimates of Medicaid spend down are too high because some people transfer their assets to children or other relatives in order to appear poor and to qualify for Medicaid long-term services and supports benefits (Moses, 1990). Medicaid law prohibits transfer of assets at less than market value for 5 years prior to application for Medicaid. The penalty for such transfers is a period of ineligibility for Medicaid that is linked to the value of the assets that were transferred. While this transfer of assets no doubt occurs, the empirical research on this topic finds that transfer of assets is relatively infrequent and usually involves quite small amounts of funds when it occurs (Bassett, 2004 ; Lee et al., 2006; Norton, 1995; O'Brien, 2005; Sloane and Shayne, 1993; Waidmann and Liu, 2006). The best estimate is that the maximum amount of asset transfer is about 1 percent of Medicaid nursing home expenditures (Bassett, 2004; Waidmann and Liu, 2006).

2

Research Questions

This report examines five main research questions:

1. What is the prevalence of Medicaid spend down among people aged 65 and older? What is the prevalence for people under age 65? What happens to the assets of people age 65 and older as they grow older? What happens to the home when people start using nursing home services?
2. How does Medicaid spend down differ between people in the community and those residing in a nursing home? Do more people spend down in the community or in nursing homes?
3. Among those who spend down after they start using long-term services and supports, what is the length of time it takes to spend down to Medicaid eligibility? Does this differ by spend down in the community versus the nursing home?
4. What are the socio-demographic and financial characteristics and service utilization patterns of those who spend down to Medicaid eligibility versus those who do not spend down? Do the characteristics of the spend-down population who use nursing home care differ from that of people who use personal care?
5. Are those who spend down to Medicaid eligibility in the community more likely to enter a nursing home than those who do not spend down? We will address this only for the population in the community.

3

Data and Methods

This study analyzed data from the 1996–2008 Health and Retirement Study (HRS) merged with Medicare Beneficiary Interview Summary Files, which are Medicare Beneficiary Annual Summary Files adapted to the HRS. These data enabled us to follow a cohort of people over a 12-year period to observe the incidence of spend down to Medicaid eligibility.

3.1 DATA SOURCES

The HRS is a nationally representative longitudinal survey of middle-aged and older Americans initially living in the community. The survey is conducted and managed by the University of Michigan, with primary funding from the National Institute on Aging and the Social Security Administration (University of Michigan, 2012). The HRS surveys people age 50 and older every 2 years. In addition to following respondents over time, new respondents are added as needed to replenish the sample for attrition and to add younger sample members.

The HRS has a rich assortment of measures on health, function, income and assets, living arrangements, education, public program participation, and medical care and long-term services and supports use. Although respondents enter the survey while living in the community, the survey contains data on transitions into nursing homes. In addition, it has information on Medicare and Medicaid eligibility. In the survey, Medicaid status is ascertained via self-report; respondents indicating that they are Medicaid eligible are asked to show their Medicaid card, although not all do.

Because beneficiaries are often confused about the differences between Medicare and Medicaid eligibility and coverage, we

matched HRS data with Medicare administrative eligibility and claims data from the annual Medicare Beneficiary Interview Summary Files to obtain additional information on survey respondents' Medicaid eligibility status. For each Medicare beneficiary, the Medicare data contain information on "buy-in;" that is, whether state Medicaid programs pay the Medicare premiums, deductibles, and coinsurance. Buy-in serves as an indicator of Medicaid eligibility in addition to self-report of Medicaid eligibility in the HRS. However, Medicaid programs pay Medicare premiums, deductibles, and coinsurance for dual-eligible beneficiaries who receive their state's full Medicaid program benefits, and for slightly higher income people participating in Medicare Savings Programs that only provide financial help paying for Medicare premiums, deductibles, and coinsurance. The Medicare data do not distinguish between the two types of dual eligible. As a result, these Medicare data overcount "full" Medicaid beneficiaries who are financially eligible for the full range of Medicaid services, including long-term services and supports. Approximately 76.3 percent of the dual-eligible population (about 6.8 million individuals) qualifies for full Medicaid benefits (Kaiser Commission on Medicaid and the Uninsured, 2012).

About 15 percent of HRS respondents who reported that they were Medicare beneficiaries refused to give permission to link their Medicare data to their HRS survey responses, so data on Medicaid eligibility from claims data are missing for this group of people. Finally, there are no Medicare data on people who are not eligible for the Medicare program, mostly people under the age of 65. However, Medicare beneficiaries under age 65 were matched to their Medicare data, if available.

3.2 STUDY POPULATION AND SAMPLE SIZE

We used the RAND HRS version K dataset for this study, supplemented with additional data from the HRS Exit and Helper files and HRS (non-RAND version) raw data. We identified respondents who participated in or newly entered the survey in either 1996 or 1998 and analyzed their survey responses through 2008. Survey responses are available every 2 years for respondents unless they miss participating in a survey wave for any reason. Many people are nonrespondents for at least one wave, some for more than one wave. Missing data in a survey wave after entrance into the sample did not

require any adjustment since such occurrences appeared to be random. Following respondents for 10–12 years allowed enough time for some respondents to become users of long-term services and supports and to spend down to Medicaid. We did not use earlier HRS cohorts because of limitations in measuring home care services in the 1992 and 1994 survey waves. The sample size for the analysis for which we have full information was 21,853 persons.

Almost all variables for sociodemographic, health, and living arrangements for each respondent were populated from values in the wave in which they entered the survey, except for their Medicaid status and long-term services and supports use. In addition, variables were created for Medicaid eligibility status, three different measures of Medicaid spend down, and four categories of long-term services and supports users and nonusers.

3.2.1 Medicaid Eligibility

Identifying Medicaid eligibility is a difficult task because there are two sources of information on Medicaid eligibility—self-reports from the HRS, and Medicare/Medicaid dual eligibility status from Medicare eligibility and claims data. We found some inconsistencies between the two data sources. As a result of these complexities, we developed several decision rules. In general, the Medicare administrative data were judged to be more accurate than respondent self-reported information.

- For individuals in a time period for which we had HRS data and Medicare buy-in data, if there was evidence of Medicaid buy-in in the Medicare data, even if there was no evidence of Medicaid eligibility in the HRS, then the respondent was categorized as Medicaid eligible.
- If the respondent reported Medicaid eligibility, but did not show his or her Medicaid card to the interviewer, and the Medicare administrative data showed no Medicaid eligibility for the survey wave in question or the prior survey wave, the respondent was coded as not eligible for Medicaid in that survey wave.
- For HRS respondents for whom we have Medicare data and for whom there was no buy-in flag, if they showed a Medicaid card in the HRS raw data, then we coded them as Medicaid eligible.
- For people for whom we did not have Medicare claims data (either because they are not Medicare eligible or

because they did not give permission to obtain their Medicare data), if they had a Medicaid card in the HRS raw data or self-report of Medicaid eligibility in the RAND HRS, then we coded them as Medicaid eligible.

3.2.2 Medicaid Spend Down

To create an analytic spend-down measure, we assessed changes in Medicaid eligibility status, as opposed to measuring asset depletion and whether the cost of long-term services and supports was higher than income. The HRS has no expenditure data on health and long-term services and supports, making it impossible to calculate spend down of assets as defined by Medicaid eligibility regulations. Thus, like virtually all other studies of Medicaid spend down, this study is technically a study of transitions to Medicaid rather than a study of Medicaid asset spend down.

In order for respondents to be defined as having spent down, they must have experienced a transition from non-Medicaid to Medicaid status during the 10- to 12-year observation period, where Medicaid status is the respondents' final or permanent insurance status. People who "temporarily" spend down—i.e., people who were Medicaid beneficiaries in one time period (T_x) and then were not Medicaid beneficiaries in the next time period (T_{x+1})—were not counted as Medicaid spend-down beneficiaries. We believe most of these individuals who switched back and forth involved measurement error rather than real differences in Medicaid status. Therefore, our measures of Medicaid spend down reflect only the experience of those who remained Medicaid beneficiaries after transitioning to Medicaid. Thus, our estimates of the extent of Medicaid spend down are conservative.

Using this analytic spend-down measure, we identified three different Medicaid spend-down measures. Each measure is expressed as the quotient of a specified numerator and denominator. For each measure, the numerator is the number of people who spent down, which is the same in all three measures. The denominators are different in each measure because of the differing viewpoints of stakeholders interested in Medicaid spend down.

Using this analytic spend-down measure, we identified three different Medicaid spend-down measures. Each measure is expressed as the quotient of a specified numerator and denominator. For each measure, the numerator is the number of people who spent down, which is the same in all three measures. The denominators are different in each measure because of the differing viewpoints of stakeholders interested in Medicaid spend down. The three different Medicaid spend down measures are the following (see **Figure 3-1**):

- **Non-Medicaid measure (Cohort 1):** Number of respondents who spent down divided by the number of

respondents who did not have Medicaid eligibility when they entered the survey in 1996 or 1998. This is the proportion of the private-pay population that spent down. This measure is of interest to policy makers and consumer advocates who are concerned about people impoverishing themselves because of the high out-of-pocket cost of long-term services and supports. The analysis sample contained 20,283 non-Medicaid respondents at risk of spend down.

- **Medicaid measure (Cohort 2):** Number of respondents who spent down divided by the number of respondents who were Medicaid eligible at any time during the observation period. This percentage is the proportion of the Medicaid population who spent down. This measure is of interest to state policy makers concerned about growing Medicaid rolls and state budget expenditures. The analysis sample contained 3,473 persons who were Medicaid eligible at any time over the observation period.
- **Total population measure (Cohort 3):** Number of respondents who spent down divided by the number of all respondents. This is the proportion of the total population that spent down over the observation period. Because most people are never Medicaid beneficiaries, the proportion of respondents meeting this definition is similar to the non-Medicaid measure proportion (Cohort 1). This measure is of interest to policy makers who want to know what the overall risk of spending down is for the entire population age 50 and over. The analysis sample contained 21,853 respondents.

Figure 3-1. Three Measures of Medicaid Spend Down

Non-Medicaid Measure (Cohort 1) =	$\frac{\text{respondents who spent down}}{\text{all non-Medicaid respondents at baseline}}$
Medicaid Measure (Cohort 2) =	$\frac{\text{respondents who spent down}}{\text{all respondents who were Medicaid at any time during observation period}}$
Total Measure (Cohort 3) =	$\frac{\text{respondents who spent down}}{\text{all respondents at baseline}}$

3.2.3 Use of Long-Term Services and Supports

We hypothesized that Medicaid spend-down rates would differ by the use of long-term services and supports. Therefore, we created four categories of users of long-term services and supports: (1) respondents who did not use any nursing home or paid personal care over the course of the analytic period, (2) respondents who used paid personal care but not nursing home care, (3) respondents who used only nursing home care, and (4) respondents who both used paid personal care and nursing home care.

In defining these use categories, we developed decision rules about what types of long-term services and supports should be included. People who used only Medicare skilled nursing facility services were included, but not people who used Medicare home health care. Approximately 30–40 percent of nursing home users had short, Medicare-covered stays. Medicare skilled nursing facility services were included for three reasons: (1) to enable analysis of nursing home users as a whole; (2) because the Medicare skilled nursing facility coinsurance puts users at risk of substantial out-of-pocket costs; and (3) because many Medicare skilled nursing facility beneficiaries go on to become private pay or Medicaid nursing home beneficiaries.

On the other hand, Medicare home health care has no deductible or coinsurance requirements, so it cannot contribute financially to spend down. Unlike the frequent transitions from short-term, Medicare-covered nursing home care that result in long-term, Medicaid-paid nursing home use, respondents who use Medicare home health care do not necessarily nor frequently transition to Medicaid-paid community-based personal care. Preliminary analyses found that inclusion of Medicare home health use decreased the spend-down rate in the community long-term services and supports group to almost the spend-down rate of people who used no long-term services and supports. These users seemed to be more like respondents without any long-term services and supports use than to people who used long-term services and supports. Therefore, Medicare home health use was excluded from our definition of long-term services and supports.

Although our study categorizes people according to their use of long-term services and supports (i.e., no service use, personal care only, nursing home only, and both personal care and

nursing home care), it does not focus on the time of their service use (e.g., it does not measure spend down from the time of admission to a nursing home or from the beginning of personal care use). That is, it categorizes people based on their service use over the observation period regardless of whether the transition to Medicaid was during that period of service use. This approach allows us to consistently measure spend down among people who do and do not use long-term services and supports. It also allows us to measure what happens to nursing home users when they were in the community prior to admission. This approach differs from almost all other studies, which attempt to identify the exact dates of nursing home use and link it to Medicaid spend down. While fairly precise service-use dates are available for nursing home care in the HRS, they are not available for home care use.

3.3 METHODS

We present descriptive statistics for respondents with each category of long-term services and supports use (no use, only personal care, only nursing home use, and both personal care and nursing home use) for each of the three Medicaid spend-down cohorts. We also present tables that disaggregate people who spend down according to important policy characteristics, such as long-term services and supports use and age groups for each Medicaid spend-down measure.

In multivariate analyses, we estimated two models to address the two principal research questions: (1) a logit model to estimate the rate of spend down; and (2) an ordinary least squares (OLS) regression to estimate time to spend down, measured in 2-year increments (range 0 to 12), as the HRS is fielded every 2 years. Each regression was estimated using the first-year prospective weight for each respondent.

4 Results

4.1 RESEARCH QUESTION #1. WHAT IS THE PREVALENCE OF MEDICAID SPEND DOWN AMONG PEOPLE AGED 65 AND OLDER? WHAT IS THE PREVALENCE FOR PEOPLE UNDER AGE 65? WHAT HAPPENS TO THE ASSETS OF PEOPLE AGED 65 AND OLDER AS THEY GROW OLDER? WHAT HAPPENS TO THE HOME WHEN PEOPLE START USING NURSING HOME SERVICES?

Overall, during the study period of 1996/1998 to 2008, 9.0 percent of the total (Medicaid and non-Medicaid) study population in the HRS transitioned from non-Medicaid to Medicaid status, including 9.6 percent of the population that started as non-Medicaid at the beginning of the study period.

Medicaid spend down is not a rare occurrence among the older population. Overall, during the study period of 1996/1998 to 2008, 9.0 percent of the total (Medicaid and non-Medicaid) study population in the HRS transitioned from non-Medicaid to Medicaid status, including 9.6 percent of the population that started as non-Medicaid at the beginning of the study period (*Table 4-1*). While the spend-down population was a relatively small proportion of the overall population, the spend-down population accounted for nearly two-thirds (64.2 percent) of people who were Medicaid beneficiaries during the study period.

Of the non-Medicaid persons who spent down, the over age 65 population (age in 1996/1998) had a higher spend-down rate, at 12.9 percent, than did the under age 65 population (age in 1996/1998), at 6.9 percent. On the other hand, among the Medicaid beneficiaries who spent down, a higher proportion of the younger age group spent down (68.0 percent of Medicaid beneficiaries under age 65, and 61.9 percent of Medicaid beneficiaries age 65 and over).

Table 4-1. Medicaid Spend Down, by Age

Spend Down Measure	Percent (%)		
	<65 in 1996/1998	65+ in 1996/1998	Total
Non-Medicaid at Baseline (Cohort 1)	(N=10,885)	(N=9,398)	(N=20,283)
Spend down in age group	6.9	12.9	9.6
Spend down across age groups	38.5	61.8	100.3*
Medicaid at Some Time During Study Period (Cohort 2)	(N=1,366)	(N=2,107)	(N=3,473)
Spend down in age group	68.0	61.9	64.2
Spend down across age groups	41.7	58.6	100.3*
Total Population at Baseline (Cohort 3)	(N=11,427)	(N=10,426)	(N=21,853)
Spend down in age group	6.6	11.8	9.0
Spend down across age groups	38.4	62.0	100.4*

Source: RTI International analysis of Health and Retirement Study merged with Medicare data.

*Does not add to 100.0 percent due to rounding.

4.2 RESEARCH QUESTION #2. HOW DOES MEDICAID SPEND DOWN DIFFER BETWEEN PEOPLE IN THE COMMUNITY AND THOSE RESIDING IN A NURSING HOME? DO MORE PEOPLE SPEND DOWN IN THE COMMUNITY OR IN NURSING HOMES?

Spend down varies substantially by long-term services and supports use (*Table 4-2*). Among persons who were not Medicaid eligible at baseline, 5.6 percent of those who used no long-term services and supports spent down, while 21.2 percent of users of only personal care, 23.4 percent of users of only nursing home care, and 31.7 percent of users of both personal care and nursing home care spent down. A total of 63.1 percent of Medicaid beneficiaries over the time period who used no services spent down, as did 39.9 percent of people who used only personal care, 74.2 percent of people who used only nursing home care, and 66.0 percent of people who used both personal care and nursing home care.

Table 4-2. Medicaid Spend Down, by Use of Long-Term Services during Study Period (1996/1998–2008)

Spend Down Measure	No Long-Term Services and Supports (%)	Only Personal Care (%)	Only Nursing Home Care (%)	Nursing Home & Personal Care (%)	Total (%)
Non-Medicaid at Baseline (Cohort 1)	(N=16,042)	(N=648)	(N=2,751)	(N=842)	(N=20,283)
Spend down within service use	5.6	21.2	23.4	31.7	9.6*
Total spend down population	46.1	7.1	33.1	13.7	100.0
Medicaid During Study Period (Cohort 2)	(N=1,696)	(N=392)	(N=936)	(N=449)	(N=3,473)
Spend down within service use	63.1	39.9	74.2	66.0	64.2*
Total spend down population	48.0	7.0	31.1	13.3	100.0
Total Population at Baseline (Cohort 3)	(N=16,863)	(N=912)	(N=3,057)	(N=1,021)	(N=21,853)
Spend down within service use	5.3	15.8	21.4	26.9	9.0*
Total spend down population	45.4	7.3	33.3	14.0	100.0

Source: RTI International analysis of Health and Retirement Study merged with Medicare data.

*p < .001

Although Medicaid spend down is usually thought to be associated with the use of long-term services and supports, a large majority (46.1 percent) of persons who transition from non-Medicaid status at baseline to Medicaid status used no long-term services and supports over the study period.

Although Medicaid spend down is usually thought to be associated with the use of long-term services and supports, a large majority (46.1 percent) of persons who transition from non-Medicaid status at baseline to Medicaid status used no long-term services and supports over the study period. Among people who were Medicaid beneficiaries at some time during the study period, almost half (48.0 percent) used no long-term services and supports. It is likely that many of these people became Medicaid beneficiaries through their participation in Medicaid savings programs. In addition, while virtually all previous studies have focused on Medicaid spend down in nursing homes, the large majority of people who spend down do so in the community (i.e., people who use no long-term services and supports and people who use only personal care). Among people who spent down and did use long-term services and supports, the large majority only used nursing home care.

4.2 RESEARCH QUESTION #3. AMONG THOSE WHO SPEND DOWN AFTER THEY START USING LONG-TERM SERVICES AND SUPPORTS, WHAT IS THE LENGTH OF TIME IT TAKES TO SPEND DOWN TO MEDICAID ELIGIBILITY? DOES THIS DIFFER BY SPEND DOWN IN THE COMMUNITY VERSUS THE NURSING HOME?

An important policy question is how long it takes to spend down to Medicaid eligibility. In order to answer this question, we assess the use of personal care and nursing home services by the study cohort over 10 years and then examine the average time to spend down. As noted in the methods section, unlike other studies of Medicaid spend down, our time to spend down is the time from baseline, rather than time from beginning of service use. This methodology reflects limitations in the HRS data.

Among respondents followed over the study period, the average time to spend down was 6.8 years.

Among respondents followed over the study period, the average time to spend down was 6.8 years (**Table 4-3**). Although time to spend down varied by different patterns of long-term services and supports use, the differences were not large: for non-service users, the average time to spend down was slightly more than 7 years. However, regardless of whether people used only personal care, only nursing home services, or both personal care and nursing home care, on average, it took less than 7 years to spend down to Medicaid (6.3 years for both only personal care users and only nursing home users, and 6.9 years for users of both services). Despite the higher costs of nursing home care, spend down takes the same length of time for both users of only personal care and only nursing home services. Contrary to expectations, it takes slightly longer to spend down to Medicaid (an average of 6.9 years) for those who used both nursing home and personal care services. Average time to spend down by age follows the same pattern as for the overall spend down population, with the under age 65 population taking a somewhat longer time to spend down.

Table 4-3. Average Number of Years to Spend Down, by Use of Long-Term Services and Supports

Age Group	No Service Use	Personal Care Only	Nursing Home Only	Both Personal Care and Nursing Home
Total Sample				
6.8 years*** N=2,391	7.1 years N=1,209	5.2 years N=164	6.6 years N=706	6.8 years N=312
65+				
6.4 years*** N=1,304	6.5 years N=408	4.9 years N=82	6.5 years N=566	6.8 years N=266
Under 65				
7.3 years*** N=1,087	7.5 years N=801	5.6 years N=82	7.2 years N=140	7.3 years N=64

Source: RTI International analysis of Health and Retirement Study merged with Medicare data.

*p < .001

Multivariate analysis was conducted to examine personal characteristics that extend or shorten the time to spend down. We estimated the OLS regressions using the following general empirical model:

$$\text{Number of years to Medicaid spend down} = f(\text{long-term services and supports receipt setting} + \text{demographic characteristics} + \text{income/assets} + \text{health status} + \text{functional status} + \text{cognitive status} + \text{mental health status} + \text{long-term care insurance ownership}) + \text{error}$$

Separate, similar models for each of the three types of service use (personal care only users, nursing home only users, and both personal care and nursing home) were also estimated:

$$\text{Number of years to Medicaid spend down} = f(\text{demographic characteristics} + \text{income/assets} + \text{health status} + \text{functional status} + \text{cognitive status} + \text{mental health status} + \text{long-term care insurance}) + \text{error}$$

Categories of independent variables in the model include the following:

- Sociodemographic characteristics: age, gender, race/ethnicity, marital status, education (two levels: 1—GED, high-school graduate or some college, and 2—college and graduate degrees), household size

- Health status and functional limitations: ADL summary scale, IADL summary scale, fair/poor general health indicator, sum of number of chronic conditions
- Cognitive and mental health status: Cognition Scale score and CESD scale score
- Income/assets: respondent and spousal income, net value of the primary residence, non-housing wealth
- Long-term care insurance: whether the respondent has a long-term care insurance policy.

Table 4-4 presents the results of the multivariate OLS regression models to estimate the duration of time, in years, to spend down for all long-term services and supports users, users of only personal care, users of only nursing home care, and users of both personal care and nursing home care. Negative coefficients in these models are associated with a shorter time to spend down; positive coefficients indicate a longer time to spend down.

Table 4-4. Multivariate Models of Time to Spend Down, by Use of Long-Term Services and Supports

Variable (Characteristics in 1996/1998)	Total Sample	Only Personal Care	Only Nursing Home Care	Personal Care & Nursing Home Care
Only personal care use	-0.8321**			
Only nursing home use	0.1733			
Both personal care and nursing home use	1.0061***			
Age	-0.0396***	0.0116	-0.0417*	-0.0036
Female	0.0826	-0.1617	0.3272	0.5636
Black	0.3605	0.9851	-0.0912	-0.2699
Hispanic	-0.2805	-0.2987	-1.2182	-0.8921
GED, high-school graduate, or some college	0.1247	0.7081	-0.2331	0.2059
College or postgraduate degrees	-0.0307	1.4635	-0.7533	2.0010**
Widowed	-0.0792	-0.7971	-0.4439	-0.0569
Household size	0.0206	-0.0883	0.0464	0.2369
Income (respondent & spouse) per \$1,000	0.0147**	-0.0056	0.0175	0.0264***
Net value of primary residence per \$100,000	6.6508***	3.2558	4.1760*	6.8028**
Non-housing wealth per \$100,000	0.1037	1.7599	1.1571	0.6577
LTC insurance	0.194	-0.4371	0.0062	-0.2933
ADL score ^a	-0.1243	0.0269	-0.1046	-0.1662
IADL score ^b	-0.4841***	-0.9032**	-0.5451**	-0.5950**
Fair or poor health	-0.107	-0.4873	-0.0623	0.1788
Number of chronic conditions ever had	-0.2422***	-0.155	-0.2613*	-0.1014
CESD score ^c	0.004	0.0187	0.0417	0.0121
Total Cognition score ^d	0.0555***	-0.0162	0.0846**	0.1039**
New in 1998	-0.8409***	-0.9137	-0.8502**	-2.1406***
Intercept	8.7457***	6.7760*	8.8059***	4.8326*
N	2,006	131	599	253
R ²	0.1345	0.1347	0.1313	0.2011

Source: RTI International analysis of Health and Retirement Study merged with Medicare data

*p < .05, **p < .01, ***p < .001.

^a Activities of Daily Living (ADL) summary score, which ranges from 0 to 5, counts the number of limitations (any difficulty) in the following activities: bathing, eating, dressing, walking across a room, and getting in or out of bed.

^b Instrumental Activities of Daily Living (IADL) score, which ranges from 0 to 5, counts the number of limitations (any difficulty) in the following activities: using a telephone, taking medication, handling money, shopping, and preparing meals.

^c The Center for Epidemiologic Studies Depression (CESD) scale (0–60) measures depressive symptoms. The CESD score is the sum of six “negative” indicators minus two “positive” indicators. The negative indicators measure whether the respondent experienced the following sentiments all or most of the time: depression, everything is an effort, sleep is restless, felt alone, felt sad, and could not get going. The positive indicators measure whether the respondent felt happy and enjoyed life, all or most of the time. Higher scores indicate more depressive symptoms.

^d The Cognition Scale, which ranges from 0 to 35, includes an immediate and delayed 10-word free recall test to measure memory; a serial seven subtraction test to measure working memory; a counting backwards test to measure speed of mental processing; an object naming test to measure knowledge and language; and recall of the date, the president, and the vice-president to measure orientation. For self-respondents, the presence and severity of cognitive impairment are defined using this 35-point cognitive scale, with higher scores indicating better performance.

Multivariate results for the total sample suggest that controlling for other factors, people who use only personal care have a shorter average time to spend down—0.8 years, or about 9.6 months, shorter—than the total sample, while people who use both personal care and nursing home care have a longer average time to spend down—1.0 year longer. Users of only nursing home care take about the same time to spend down as the total sample. The only variable that was statistically significant across all four models was the number of limitations in IADLs, a factor that may be related to cognitive impairment. Indeed, the cognition score was significant in three of the four regressions. The number of limitations in IADLs was the only statistically significant factor in the regression for persons only using personal care, possibly in part because the sample size was relatively small. Other variables that were statistically significant in at least one of the four regressions and predicted longer time to spend down include income, net value of house/primary residence, having college or postgraduate degrees, and total cognition score. Other variables that were statistically significant in at least one of the four regressions and predicted shorter time to spend down include age, fair or poor health, and the number of chronic conditions. Interestingly, ownership of a long-term care insurance policy was not a significant variable in any of the models in delaying the time to spend down, which may reflect the small percentage of the population with policies in 1996/1998.

4.4 RESEARCH QUESTION #4. WHAT ARE THE SOCIO-DEMOGRAPHIC AND FINANCIAL CHARACTERISTICS AND SERVICE UTILIZATION PATTERNS OF THOSE WHO SPEND DOWN TO MEDICAID ELIGIBILITY VERSUS THOSE WHO DO NOT SPEND DOWN? DO THE CHARACTERISTICS OF PEOPLE WHO SPEND DOWN DIFFER IN THE TWO SETTINGS?

People who spend down to Medicaid are disproportionately females, minorities, persons with lower educational attainment, and those in poorer health and functional status compared to non-Medicaid persons who do not spend down to Medicaid eligibility.

Sociodemographic and financial characteristics and health status of individuals who spend down to Medicaid eligibility are markedly different from those of people who do not spend down (*Table 4-5*). All respondent characteristics are those at the beginning of the study period (1996/1998). People who spend down to Medicaid are disproportionately females,

Table 4-5. Demographic and Health Status Characteristics at Baseline of Study Cohorts, by Spend Down Status

Characteristics in 1996/1998	Non-Medicaid at Baseline (Cohort 1)		Medicaid During Study Period (Cohort 2)		Total Population at Baseline (Cohort 3)	
	No Spend Down (%)	Spend Down (%)	No Spend Down (%)	Spend Down (%)	No Spend Down (%)	Spend Down (%)
N	18,109 ^a	2,174 ^a	1,299 ^a	2,174 ^a	19,679 ^a	2,174 ^a
Demographics						
Age (years)	64.7	69.7 ***	70.3	69.7	65.1	69.7 ***
Female	52.9	64.1 ***	71.9	64.1 ***	54.1	64.1 ***
Black	7.0	18.2 ***	25.8	18.2 ***	8.2	18.2 ***
White	90.3	77.3 ***	63.6	77.3 ***	88.6	77.3 ***
Hispanic	4.2	11.2 ***	21.7	11.2 ***	5.2	11.2 ***
Less than GED or high-school graduate	20.6	50.1 ***	72.8	50.1 ***	23.9	50.1 ***
GED, high school graduate, or some college	58.6	44.4 ***	24.9	44.4 ***	56.5	44.4 ***
College or postgraduate degrees	20.8	5.4 ***	2.3	5.4 ***	19.6	5.4 ***
Married	70.1	42.8 ***	24.4	42.8 ***	67.2	42.8 ***
Widowed	18.8	37.7 ***	49.1	37.7 ***	20.7	37.7 ***
Household size (average number of persons)	2.3	2.2	2.2	2.2	2.3	2.2
Insurance						
Medicare	45.7	65.8 ***	77.3	65.8 ***	47.7	65.8 ***
LTC insurance	11.1	4.3 ***	2.0	4.3 ***	10.5	4.3 ***
Health						
ADL ^b score (0-5)	0.2	0.5 ***	1.1	0.5 ***	0.3	0.5 ***
IADL ^c score (0-5)	0.2	0.5 ***	1.0	0.5 ***	0.2	0.5 ***
Excellent health	17.8	6.9 ***	3.0	6.9 ***	16.9	6.9 ***
Very good health	30.6	17.6 ***	8.1	17.6 ***	29.2	17.6 ***
Good health	29.8	30.6	20.1	30.6 ***	29.2	30.6 ***
Fair health	15.8	28.4 ***	34.0	28.4 ***	16.9	28.4 ***
Poor health	6.0	16.5 ***	34.9	16.5 ***	7.8	16.5 ***
Ever had arthritis	41.3	53.8 ***	68.5	53.8 ***	43.0	53.8 ***

(continued)

Table 4-5. Demographic and Health Status Characteristics at Baseline of Different Cohorts, by Spend Down Status (continued)

Characteristics in 1996/1998	Non-Medicaid at Baseline (Cohort 1)		Medicaid During Study Period (Cohort 2)		Total Population at Baseline (Cohort 3)	
	No Spend Down (%)	Spend Down (%)	No Spend Down (%)	Spend Down (%)	No Spend Down (%)	Spend Down (%)
Ever had cancer	9.7	9.5	9.7	9.5	9.7	9.5
Ever had diabetes	10.0	17.9 ***	25.0	17.9 ***	11.0	17.9 ***
Ever had heart problems	17.9	24.4 ***	34.9	24.4 ***	18.9	24.4 ***
Ever had lung disease	6.0	9.4 ***	13.7	9.4 ***	6.5	9.4 ***
Ever had stroke	5.3	10.1 ***	15.3	10.1 ***	5.9	10.1 ***
Ever had psychiatric problems	7.8	13.6 ***	25.3	13.6 ***	8.9	13.6 ***
Sum of conditions ever had (average # of conditions)	1.4	1.9 ***	2.5	1.9 ***	1.4	1.9 ***
CESD score (0–60) ^d	1.2	2.0 ***	2.9	2.0 ***	1.3	2.0 ***
Total cognition score (0–35) ^e	23.6	20.1 ***	17.8	20.1 ***	23.2	20.1 ***

Source: RTI International analysis of Health and Retirement Study merged with Medicare data.

*p < .05, **p < .01, ***p < .001.

^aThe exact N varies for each variable, depending on the amount of missing data. The indicated number is the maximum N for that each spend down category.

^bActivities of Daily Living (ADL) summary score, which ranges from 0 to 5, counts the number of limitations (any difficulty) in the following activities: bathing, eating, dressing, walking across a room, and getting in or out of bed.

^cInstrumental Activities of Daily Living (IADL) score, which ranges from 0 to 5, counts the number of limitations (any difficulty) in the following activities: using a telephone, taking medication, handling money, shopping, and preparing meals.

^dCenter for Epidemiologic Studies Depression (CESD) scale (0-60) measures depressive symptoms. The CESD score is the sum of six “negative” indicators minus two “positive” indicators. The negative indicators measure whether the respondent experienced the following sentiments all or most of the time: depression, everything is an effort, sleep is restless, felt alone, felt sad, and could not get going. The positive indicators measure whether the respondent felt happy and enjoyed life, all or most of the time. Higher scores indicate more depressive symptoms.

^eCognition Scale, which ranges from 0 to 35, includes an immediate and delayed 10-word free recall test to measure memory; a serial seven subtraction test to measure working memory; a counting backwards test to measure speed of mental processing; an object naming test to measure knowledge and language; and recall of the date, the president, and the vice-president to measure orientation. For self-respondents, the presence and severity of cognitive impairment are defined using this 35-point cognitive scale, with higher scores indicating better performance.

minorities, persons with lower educational attainment, and those in poorer health and functional status compared to non-Medicaid persons who do not spend down to Medicaid eligibility.

4.4.1 Demographic Characteristics

Individuals who spend down to Medicaid have demographic characteristics generally associated with financial and other vulnerabilities, such as minority status, widowhood, and low education. Unlike wealth and income characteristics that can change during the study period (with the exception of age), demographic characteristics remain constant for the duration of the study. Individuals who spent down to Medicaid were on average 5 years older and significantly more likely to be female and Black or Hispanic than those who did not spend down. For example, African Americans represented 18.2 percent and Hispanics 11.2 percent of the spend-down population, compared with 7.0 percent and 4.2 percent, respectively, of the non-spend-down population. While 42.8 percent of the spend-down group was married, 70.1 percent of the non-spend-down group was married. The differences in education are particularly striking: only 5.4 percent of the spend-down group had college or post-college education compared to almost 20.8 percent among the non-spend-down group.

4.4.2 Insurance Coverage

In terms of insurance coverage, almost 66 percent of the spend-down group were Medicare beneficiaries at the beginning of the study period, compared to almost 46 percent in the non-spend-down group; most of these differences are explained by age. More respondents in the non-spend-down group reported having a long-term care insurance policy compared to respondents who eventually qualified for Medicaid: 11.1 percent versus 4.3 percent. Thus, although having a private, long-term care insurance policy can provide protection against spend down, limitations in coverage may mean that it does not always prevent spend down. Alternatively, those individuals could have let their policies lapse because they could no longer afford the premiums.

4.4.3 Health and Functional Status

On average, the spend-down group is characterized by higher chronic disease burden, worse general and cognitive health, and higher frailty levels at baseline than those in the non-spend

down group. Only 6.0 percent of respondents in the non-spend down group reported poor health at baseline compared with 16.5 percent in the spend-down group. Spend-down respondents had higher rates of diabetes, heart problems, lung disease, stroke, and more chronic conditions overall. In addition, the spend-down group had a higher number of ADL and IADL impairments compared with the non-spend-down group. They also reported higher rates of psychiatric problems and more depressive symptoms (higher CESD score) than those in the non-spend down group. Respondents who eventually qualified for Medicaid also had higher levels of cognitive impairment than those in the non-spend-down group (total cognition score of 20.1 versus 23.6).

4.4.4 Income and Wealth

Data on income, assets, and income transfers are presented in **Tables 4-6 and 4-7**. Major differences exist in baseline income and wealth among those who did and did not spend down to Medicaid eligibility, with the spend down group having much lower income and assets. As shown in **Table 4-6**, the median combined respondent-spousal income for the spend-down group was \$13,200 at baseline, compared with \$37,500 for those who did not spend down.

People who spent down had far fewer assets than did people who did not spend down. At the beginning of the study period, median total wealth less individual retirement accounts (IRAs) for the spend down group was \$33,000, compared with \$135,000 among the non-spend down group. Moreover, people who spent down to Medicaid on average had one third the median amount of non-housing assets (exclusive of tax-deferred retirement plans) at baseline than did the non-spend down group (\$24,000 and \$86,000, respectively), and their median net value of the house (i.e., home equity) was just \$17,000, compared with \$68,000 among the non-spend down group.

Table 4-7 presents income and asset distribution of HRS respondents by age and spend down status. The income and asset classes are quartiles are calculated using total respondents' income and assets. There are major differences in how baseline income and assets are distributed between spend down and non-spend down groups in both age groups (under and over 65), as well as in total, with the spend-down

population having much lower income and assets. For example, in the younger group, 37.6 percent of those in the non-spend-down group fall into the highest income quartile, which is \$61,000 or more, compared with 4.1 percent of those who did spend down during the study period. Similarly, among those aged 65 and over, 15.0 percent of the non-spend-down group placed in the highest income quartile at baseline versus 2.4 percent of those who spent down.

Non-housing wealth follows the same pattern. For the under 65 population, fully 37.6 percent of the non-spend-down population had non-housing assets in the top quartile (\$74,529) compared with 4.2 percent of the spend-down population. Similarly, for the population age 65 and older, 15.0 percent of the non-spend-down population was in the top quartile compared to 2.4 percent of the spend-down population. For the total population, 27.9 percent of the non-spend-down group falls in the highest wealth quartile, compared to 5.1 percent of those who spent down.

Finally, total wealth follows the same pattern as income and non-housing wealth. For example, for the younger population, about 26.1 percent of the non-spend-down group's total wealth is in the highest quartile (\$252,000 or more) compared to 3.1 percent of the spend-down group. Similarly, for the population age 65 and over, 31.0 percent of the non-spend-down group's total wealth is in the highest quartile, compared with 6.0 percent of the spend-down group. For the total population, 28.2 percent of the non-spend-down population had assets in the top quartile, compared with 4.6 percent of the spend-down population.

The median income and assets for the spend-down population begin substantially below those of the non-spend-down population. Over time, the income and assets of the spend-down population are either flat or decreasing while income and assets for the non-spend-down population increase substantially.

Table 4-8 shows the distribution of assets by income for people who spend down and use long-term services and supports, and people who do not spend down. The data show that there are not major differences in the distribution of income and assets among people who spend down using long-term services and supports and people who do not use those services and supports. Only a small proportion of people who spend down have low incomes and high assets. For example, among people who spend down who use long-term services and supports, only 13.9 percent had incomes in the two lower quartiles and had assets in the two higher quartiles. Furthermore, the data show that only a small proportion of people who spend down have both relatively high incomes and relatively high assets; only 4.4 percent of long-term services and supports users are in both the two highest income and two highest assets quartiles.

Table 4-6. Income and Wealth Characteristics of the Three Cohorts at Baseline, by Spend Down Status

	Non-Medicaid at Baseline (Cohort 1)		Medicaid During Study Period (Cohort 2)		Total Population at Baseline (Cohort 3)	
	No Spend Down	Spend Down	No Spend Down	Spend Down	No Spend Down	Spend Down
	Median (\$)	Median ^a (\$)	Median (\$)	Median (\$)	Median (\$)	Median (\$)
N	18,109	2174	1,299	2,174	19,679	2,174
Financial Status 1996/1998						
Income (respondent + spouse)	37,500	13,200 ***	6,972	13,200 ***	34,980	13,200 ***
Non-housing assets ^b less IRA	21,000	700 ***	0	700 ***	17,000	700 ***
Net value of primary residence	68,000	17,000 ***	0	17,000 ***	62,000	17,000 ***
Total wealth less IRA	135,000	33,000 ***	675	33,000 ***	123,000	33,000 ***
Transfers of Assets						
Since previous wave transferred more than \$500 to children	46.9%	25.0% ***	7.8%	25.0% ***	44.5%	25.0% ***
Gave financial help to relatives	8.8%	4.9% ***	3.8%	4.9%	8.6%	4.9% ***
Since previous wave child given deed to home	1.5%	3.1% ***	2.1%	3.1%	1.6%	3.1% ***

Source: RTI International analysis of Health and Retirement Study merged with Medicare data.

*p < .05, **p < .01, ***p < .001. Wilcoxon tests of differences between medians.

^aSpend down median income and assets are repeated for each cohort in order to show statistical significant differences with no spend-down group.

^bNon-housing assets include the net value for stocks, mutual funds, and investment trusts, checking, savings, or money market accounts, CD, government savings bonds, and T-bills, bonds and bond funds, and all other savings minus the debts. This total does not include the value of IRAs and Keogh plans, nor does it include the value of any real estate, vehicles, or businesses.

Table 4-7. Income and Assets Distribution of Non-Medicaid Population at Baseline, by Age and Spend Down Status

Financial Characteristics 1996/1998 ^a	1996/1998 Baseline			Under 65 Years of Age			65 Years of Age and Over			All Respondents		
	No Spend Down (%)	Spend Down (%)	Total (%)	No Spend Down (%)	Spend Down (%)	Total (%)	No Spend Down (%)	Spend Down (%)	Total (%)	No Spend Down (%)	Spend Down (%)	Total (%)
N's	9,359	903	10,262	7,205	1,037	8,242	16,564	1,940	18,504			
Total Wealth Less IRA												
Under \$38,900	19.8	65.2	23.8***	14.5	49.1	18.9***	17.5	56.6	21.6***			
\$38,900 to \$111,999	27.2	24.3	26.9*	25.5	31.6	26.2***	26.4	28.2	26.6**			
\$112,000 to \$251,999	26.9	7.4	25.2***	29.0	13.3	27.0***	27.8	10.6	26.0***			
\$252,000 and more	26.1	3.1	24.0***	31.0	6.0	27.9***	28.2	4.6	25.7***			
Net Value of Non-Housing Wealth												
Under \$400	25.0	71.9	29.1***	14.4	37.5	17.3***	20.4	53.5	23.9***			
\$400 to \$13,999	25.9	19.8	25.4***	23.3	34.0	24.7***	24.8	27.4	25.1***			
\$14,000 to 74,524	25.3	5.8	23.6***	28.9	21.2	28.0***	26.9	14.0	25.5***			
\$74,525 and more	23.8	2.5	21.9***	33.4	7.2	30.1***	27.9	5.1	25.5***			
Respondent and Spousal Income												
Under \$15,940	10.5	53.4	14.3***	22.7	60.5	27.5***	15.8	57.2	20.2***			
\$15,940 to \$31,908	19.5	27.9	20.3***	36.6	30.2	35.8***	27.0	29.1	27.2***			
\$31,909 to \$60,999	32.4	14.5	30.8***	25.7	6.9	23.3***	29.5	10.5	27.5***			
\$61,000 and more	37.6	4.2	34.6***	15.0	2.4	13.5***	27.8	3.2	25.2***			

Source: RTI International analysis of Health and Retirement Study merged with Medicare data.

*p < .05, **p < .01, ***p < .001.

^aIncome and assets are divided into quartile classes of the total population at baseline.

Table 4-8. Spend-Down Population Income and Assets by Use of Long-Term Services and Supports, by Quartiles

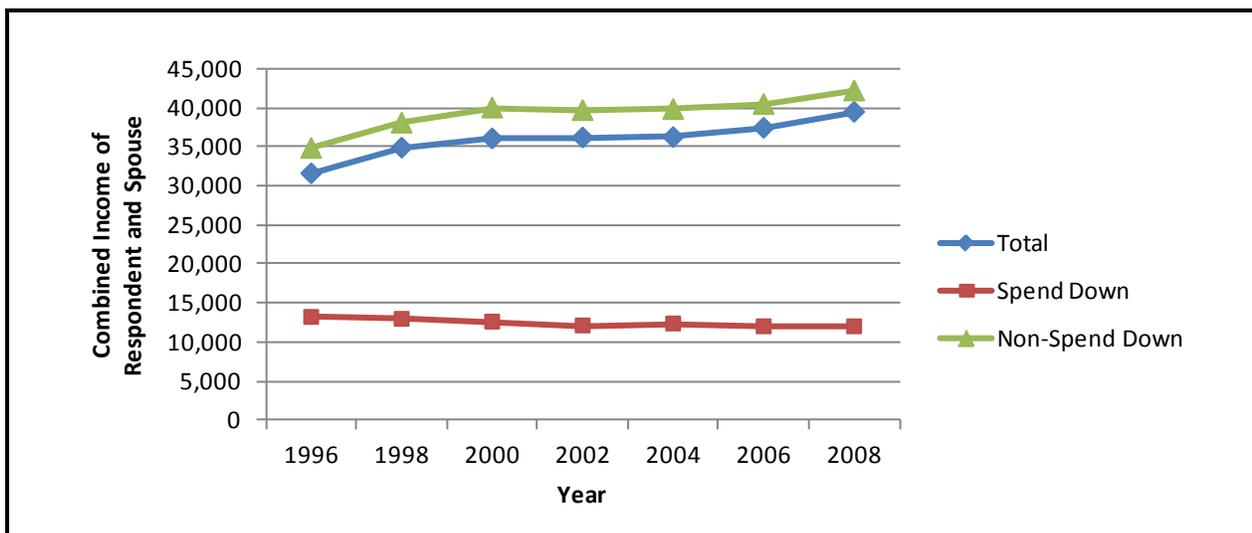
Income Quartiles	Total Assets Less IRAs Quartiles														
	No Long-Term Services and Supports Use					Long-Term Services and Supports Use					Total				
	\$0– 38,899	\$38,900– 111,999	\$112,000– 251,999	\$252,000+ \$252,000+	Total	\$0– 38,899	\$38,900– 111,999	\$112,000– 251,999	\$252,000+ \$252,000+	Total	\$0– 38,899	\$38,900– 111,999	\$112,000– 251,999	\$252,000+ \$252,000+	Total
N's	660	282	95	40	1,077	567	329	140	61	1,097	1,227	611	235	101	2,174
\$0–15,939	40.1%	12.1%	2.1%	0.6%	54.9%	39.0%	17.9%	4.8%	0.7%	62.4%	39.6%	15.0%	3.5%	0.6%	58.7%
\$15,940– 31,908	16.2%	8.8%	3.4%	1.0%	29.5%	9.8%	9.0%	6.2%	2.2%	27.3%	13.0%	8.9%	4.8%	1.6%	28.4%
\$31,909– 60,999	4.5%	4.2%	2.3%	0.6%	11.6%	2.5%	2.6%	1.5%	1.6%	8.1%	3.4%	3.4%	1.9%	1.1%	9.8%
\$61,000+	0.5%	1.1%	0.9%	1.5%	4.0%	0.4%	0.5%	0.3%	1.0%	2.2%	0.4%	0.8%	0.6%	1.2%	3.1%
Total	61.3%	26.2%	8.8%	3.7%	100.0%	51.7%	30.0%	12.8%	5.6%	100.0%	56.4%	28.1%	10.8%	4.6%	100.0%

Source: RTI International analysis of Health and Retirement Study merged with Medicare data.

Quartile classes are determined by the income and assets of the total population at baseline.

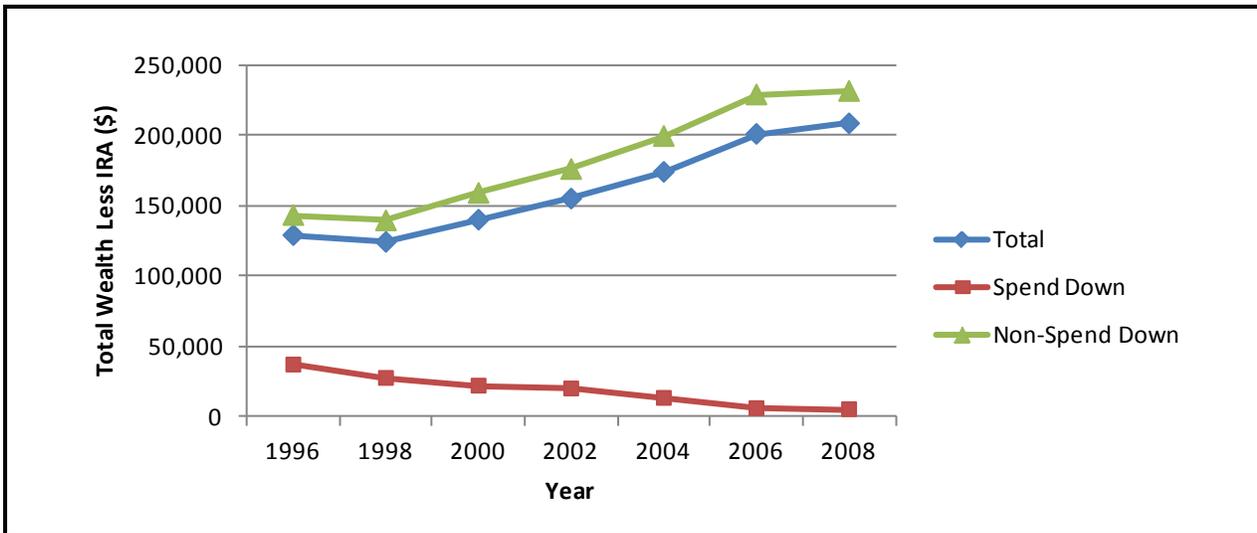
Figures 4-1 through **4-4** chart median income and assets of the non-Medicaid population total, the spend down population, and the non-spend-down population, from 1996 through 2008. The median income and assets for the spend-down population begin substantially below those of the non-spend-down population. Over time, the income and assets of the spend-down population are either flat or decreasing while income and assets for the non-spend-down population increase substantially. The under age 65 and the over age 65 populations have similar trajectories (not shown), with the income and assets of the under 65 and over 65 spend-down population staying flat or declining, while the income and assets of the non-spend-down population increases over time.

Figure 4-1. Median Income (Respondent and Spouse)



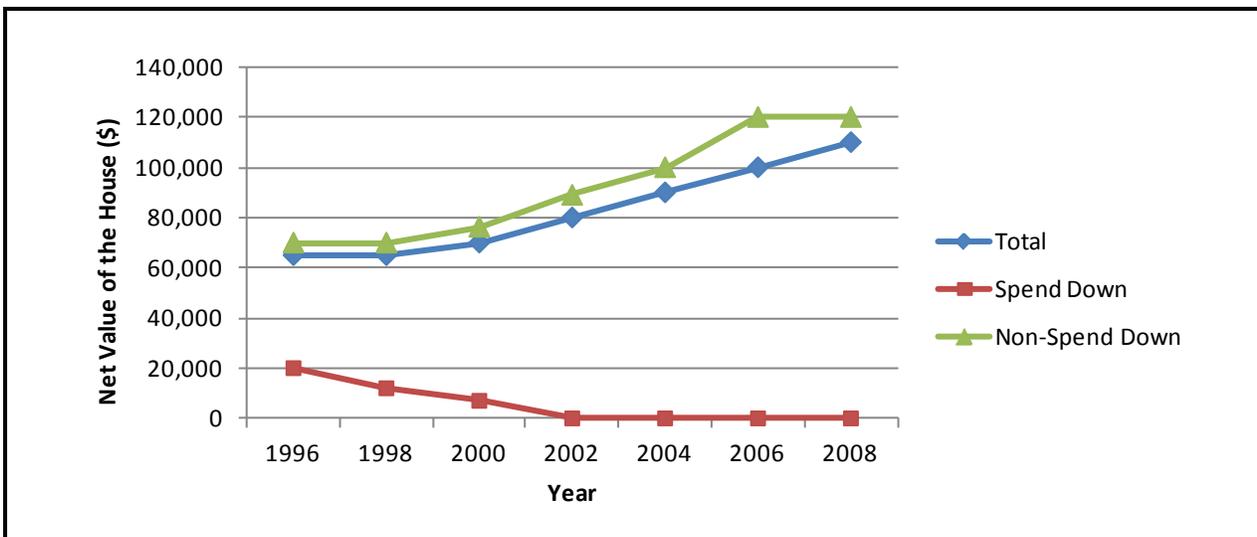
Source: RTI International analysis of Health and Retirement Study merged with Medicare data.

Figure 4-2. Total Median Wealth Less IRA



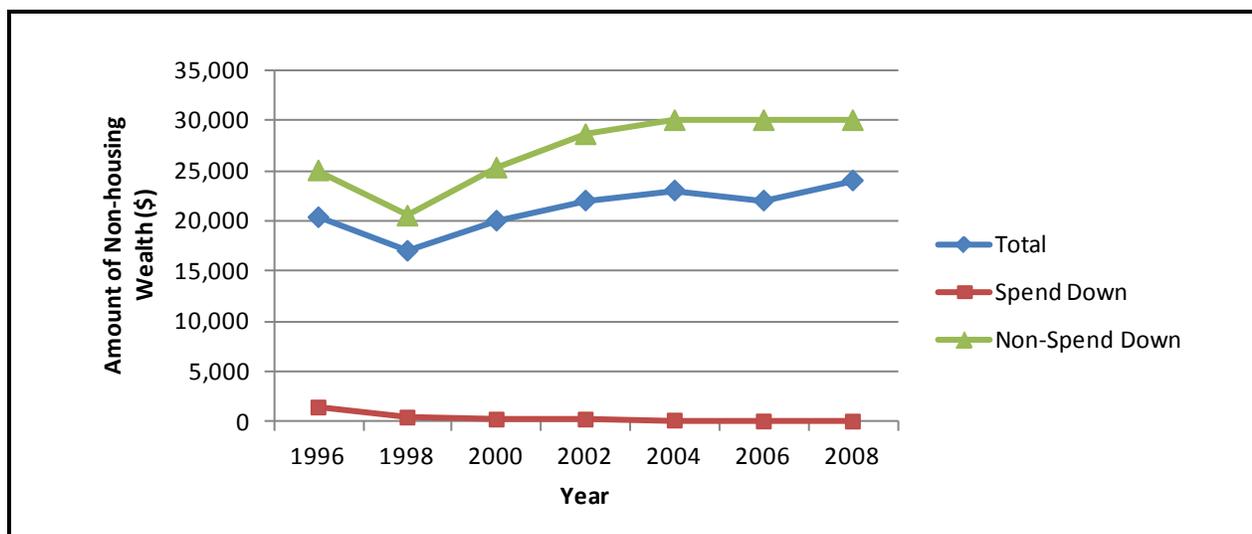
Source: RTI International analysis of Health and Retirement Study merged with Medicare data.

Figure 4-3. Median Net Value of House (Primary Residence)



Source: RTI International analysis of Health and Retirement Study merged with Medicare data.

Figure 4-4. Median Net Value of Non-Housing Wealth



Source: RTI International analysis of Health and Retirement Study merged with Medicare data.

4.4.5 Wealth Transfers

People who spend down to Medicaid are much *less* likely to transfer their assets than are people who do not spend down to Medicaid .

People who spend down to Medicaid are much less likely to transfer their assets than are people who do not spend down to Medicaid (see **Table 4-6**). Among respondents who spend down to Medicaid, 25.0 percent reported that they have given their children more than \$500 in the past 2 years, compared with 46.9 percent among those who never qualified for Medicaid. Moreover, 8.8 percent in the non-spend-down group reported giving money to other relatives, compared with 4.9 percent in the spend-down group. Finally, a small proportion of the population, 1.5 percent for the non-spend-down group, and 3.1 percent for the spend-down group, reported giving children the deed to the house.

The general pattern of greater transfer of assets by the non-spend-down population holds when the sample is stratified by under and over age 65 (**Table 4-9**). For example, among the population that is age 65 and over at baseline, 41.6 percent of the non-spend-down population transferred assets to their children since the last HRS survey wave, compared with 24.7 percent of the spend-down population.

Table 4-9. Transfer of Assets in 1996/1998 by Non-Medicaid Population (Cohort 1), by Age and Spend Down Status

	Under 65				Over 65			
	N	No spend down (%)	N	Spend Down (%)	N	No spend down (%)	N	Spend down (%)
Since previous wave, transferred more than \$500 to children	9,149	51.0	870	25.3***	7,300	41.6	1,056	24.7***
Gave financial help to other relatives	9,728	9.7	932	5.1***	3,645	6.2	393	4.6
Since previous wave, child given deed to home	7,636	0.9	802	1.1	5,677	2.2	896	4.3**

Source: RTI International analysis of Health and Retirement Study merged with Medicare data.

*p < .05, **p < .01, ***p < .001.

4.4.6 Spend Down by Use of Long-Term Services and Supports

We also examined whether 1996/1998 baseline characteristics of people who spend down differ depending on whether they use personal care or nursing home care. To examine these differences, we categorized the spend-down population based on their use of long-term services and supports over the study period, from lower to highest intensity: (1) no long-term services and supports use, (2) only use of personal care, (3) only use of nursing home care, and (4) use of both personal care and nursing home use. The descriptive analyses of the differences in sociodemographic and financial characteristics by long-term services and supports use for the spend-down group are presented in *Table 4-10*.

Table 4-10. 1996/1998 Baseline Characteristics of the Spend-Down Population, by Use of Long-Term Services and Supports

Characteristics in 1996/1998	Percent (%)				
	No Long-Term Services and Supports	Only Personal Care Services	Only Nursing Home Care	Personal Care and Nursing Home Services	Total Spend Down Population
N's	1,077	149	664	284	2,174
Demographics					
Age (in years)	63.7	67.9	75.1	77.2	69.7 ***
Female	59.0	68.7	64.7	76.9	64.1 ***
Black	24.1	25.2	12.8	8.7	18.2 ***
White	68.9	69.3	85.4	88.7	77.3 ***
Hispanic	18.2	16.8	4.2	2.3	11.2 ***
Less than high-school graduate or GED					
GED, high-school graduate, or some college	45.1	32.1	46.4	43.6	44.4 *
College or postgraduate degrees	5.3	2.6	6.7	4.3	5.4
Married	46.7	48.9	38.0	38.7	42.8 ***
Widowed	26.5	28.7	48.8	51.4	37.7 ***
Household size (mean number of people)	2.6	2.4	1.9	1.9	2.2 ***
Income and Assets					
Value of primary residence (\$ median)	20,000	16,000	27,000	25,000	24,000
Net value of primary residence (\$ median)	14,000	11,000	23,000	20,000	17,000**
Total wealth less IRA (\$ median)	21,800	20,000	43,000	41,000	33,000
Income of respondent + spouse (\$ median)	14,480	11,280	13,076	12,000	13,200 ***
Non-housing wealth (\$ median)	0	2	4,500	4,900	700 ***
Transfers of Assets Between 1996 and 1998					
Since previous wave transferred more than \$500 to children	25.1	26.0	22.6	29.3	25.0
Gave financial help to other relatives	5.3	5.2	4.9	1.0	4.9
Since previous wave child given deed to home	2.3	1.9	4.0	3.8	3.1
Insurance					
Medicare	44.5	62.9	85.3	89.4	65.8 ***
LTC insurance	3.7	2.9	4.6	6.5	4.3

(continued)

Table 4-10. 1996/1998 Baseline Characteristics of the Spend-Down Population, by Use of Long-Term Services and Supports (continued)

Characteristics in 1996/1998	Percent (%)				
	No Long-Term Services and Supports	Only Personal Care Services	Only Nursing Home Care	Personal Care and Nursing Home Services	Total Spend Down Population
Health					
Excellent health	8.8	3.3	6.8	3.3	6.9 **
Very good health	17.6	9.4	20.1	15.7	17.6 *
Good health	30.0	22.9	33.6	29.4	30.6
Fair health	29.3	33.4	27.0	26.5	28.4
Poor health	14.4	31.0	12.5	25.0	16.5 ***
Ever had arthritis	46.3	64.3	57.7	63.8	53.8 ***
Ever had cancer	7.6	9.6	10.7	13.2	9.5 *
Ever had diabetes	16.5	25.7	17.0	21.0	17.9 *
Ever had heart problems	18.8	33.5	25.4	35.3	24.4 ***
Ever had lung disease	8.1	10.7	10.3	11.1	9.4
Ever had stroke	6.2	12.8	11.9	16.8	10.1 ***
Ever had psychiatric problems	12.4	24.4	10.8	18.8	13.6 ***
Sum of conditions ever had (average # of conditions)	1.6	2.3	1.9	2.4	1.9 ***
ADL score (0–5) ^a	0.3	1.2	0.5	1.2	0.5 ***
IADL score (0–5) ^b	23.9	1.2	0.5	1.1	0.5 ***
CESD score (0–60) ^c	2.0	3.1	1.8	2.3	2.0 ***
Total Cognition score (0–35) ^d	21.2	19.0	19.3	18.8	20.1 ***

Source: RTI International analysis of Health and Retirement Study merged with Medicare data.

NOTES:

*p < .05, **p < .01, ***p < .001.

^aActivities of Daily Living (ADL) summary score, which ranges from 0 to 5, counts the number of limitations (any difficulty) in the following activities: bathing, eating, dressing, walking across a room, and getting in or out of bed.

^bInstrumental Activities of Daily Living (IADL) score, which ranges from 0 to 5, counts the number of limitations (any difficulty) in the following activities: using a telephone, taking medication, handling money, shopping, and preparing meals.

^cCenter for Epidemiologic Studies Depression (CESD) scale (0-60) measures depressive symptoms. The CESD score is the sum of six “negative” indicators minus two “positive” indicators. The negative indicators measure whether the respondent experienced the following sentiments all or most of the time: depression, everything is an effort, sleep is restless, felt alone, felt sad, and could not get going. The positive indicators measure whether the respondent felt happy and enjoyed life, all or most of the time. Higher scores indicate more depressive symptoms.

^dCognition Scale, which ranges from 0 to 35, includes an immediate and delayed 10-word free recall test to measure memory; a serial seven subtraction test to measure working memory; a counting backwards test to measure speed of mental processing; an object naming test to measure knowledge and language; and recall of the date, the president, and the vice-president to measure orientation. For self-respondents, the presence and severity of cognitive impairment are defined using this 35-point cognitive scale, with higher scores indicating better performance.

With each increase in setting intensity level, respondents who spend down are progressively older at baseline: 64 years old on average for those who do not use any long-term services and supports, 68 years old for users of only personal care, 75 years old for users of only nursing home care, and 77 years old for users of both type of services. The proportion of female respondents increases with the increase in service intensity; 59.0 percent of non-service users are females, as are 76.9 percent of those who used both types of service. In terms of racial and ethnic composition, Blacks and Hispanics constituted only a small proportion of people who spent down in nursing homes but a fairly high proportion of people who spent down using personal care. Of the people who spent down using only nursing home care, 12.8 percent were Black and 42 percent were Hispanic; in contrast, among users of only personal care, 25.2 percent were Black and 16.8 percent were Hispanic. Of people spending down who used no long-term services and supports, 26.5 percent were widowed, compared with 48.8 percent of people using only nursing home care who spent down and 51.4 percent of people who spent down who used both personal care and nursing home care.

In terms of assets and income, results are not entirely consistent. There were no statistically significant differences by service use in the spend-down group in the value of the primary residence and total wealth, but some statistically significant differences in baseline income, although the differences are not large: individuals in the spend-down group who did not use any services at baseline had a median income of \$14,480, compared with \$11,280 for users of only personal care, \$13,076 for users of only nursing homes, and \$13,200 for those who used both personal care and nursing home services. We found no statistically significant differences in money transfer behavior by setting. There were no differences by service use among the spend-down population in the rates of private long-term care insurance ownership.

As expected, there were some statistically significant differences in health, functional, and cognitive status at baseline by service use among those who spent down to Medicaid. On most measures, people who spent down and who used both personal care and nursing home services had worse health and higher levels of functional and cognitive impairment

at baseline than people who spent down who used no long-term services and supports.

4.5 RESEARCH QUESTION #5. ARE PEOPLE WHO SPEND DOWN TO MEDICAID ELIGIBILITY IN THE COMMUNITY MORE LIKELY TO ENTER A NURSING HOME THAN THOSE WHO DO NOT SPEND DOWN?

One possibility is that spending down to Medicaid in the community facilitates use of nursing home care by reducing the financial barrier to service use. The hypothesis is that once people are Medicaid eligible, they may be more willing to use institutional care since they have few financial assets left to protect. This does not appear to be the case; persons who spend down in the community have the same nursing home use rate as people who do not spend down and much lower use than people who are Medicaid beneficiaries but did not spend down.

Table 4-11 shows that there is no difference in nursing home use between people who spend down in the community compared with people who do not spend down. Only 11.4 percent of the population who spend down in the community subsequently entered a nursing home, compared with 10.9 percent nursing home use for non-Medicaid persons who did not spend down. The proportions of nursing home use for the total population are similar—11.4 percent for persons who spent down, compared with 11.7 percent of persons who did not spend down. On the other hand, while 11.4 percent of the spend-down population used nursing home care subsequent to spend down, 24.7 percent of the non-spend-down Medicaid population used nursing home care.

Table 4-11. Comparison of Nursing Home Use by Spend Down Status in Community

	Non-Medicaid at Baseline (Cohort 1)		Medicaid During Study Period (Cohort 2)		Total Population at Baseline (Cohort 3)	
	N	(%)	N	(%)	N	(%)
Nursing home use after spend down in the community	1,186	11.4	1,186	11.4	1,186	11.4
Nursing home use by those who do not spend down	18,109	10.9	1,299	24.7***	19,679	11.7

Source: RTI International analysis of Health and Retirement Study merged with Medicare data.

***p < .001.

5

Conclusions

Medicaid provides an important safety net for people who are poor or become poor, either because of the high costs of health and long-term services and supports or for other reasons. The transition from non-Medicaid to Medicaid status can be difficult, especially since it is generally associated with illness, disability, and declining income and assets. The high cost of long-term services and supports results in catastrophic out-of-pocket costs for many people needing services, some of whom spend down to Medicaid eligibility. For people who have been independent all of their lives, transitioning to Medicaid means depending on a means-tested welfare program for their health and long-term services and supports. Moreover, spending for people transitioning to Medicaid are a substantial portion of state Medicaid expenditures.

This study examines transitions to Medicaid eligibility or spend down by people age 50 and over between 1996/1998 and 2008. Data are from the 1996 to 2008 Health and Retirement Study, which has been merged with Medicare data on Medicare buy-in status. Since people often confuse Medicare and Medicaid, the Medicare data provides a more accurate designation of Medicaid eligibility than is possible from self-reported survey data. The key findings from this study are the following:

- **Over the 10-year observation period, almost 10 percent of the previously non-Medicaid population age 50 and over spent down to Medicaid eligibility.** Thus, Medicaid spend down is not a rare event. Moreover, among Medicaid beneficiaries of this age group, almost two-thirds became eligible after spending down to Medicaid eligibility. This spend-down population includes nondisabled people with low income and assets

who were under age 65 and who were initially ineligible for Medicaid, who became Medicaid eligible after age 65 due to the change in Medicaid eligibility requirements, but did not actually deplete their assets.

- **About half of people who spent down to Medicaid eligibility did not use any long-term services and supports.** Fully 46.1 percent of people who spent down did not use any long-term services and supports, 7.1 percent used only personal care, 33.1 percent used only nursing home care and about 13.7 percent used both personal care and nursing home care. The non-LTSS spend-down population may have become impoverished because of high out-of-pocket medical care costs, reductions in income due to pension limitations, or other factors related to everyday living (e.g., need to buy a new car or replace the furnace). Although the spend-down *rate* for people who do not use LTSS is much lower than it is for people who do use LTSS, there are many more people who do not use LTSS than do. Thus, a low prevalence rate of spend down for the people who do not use LTSS multiplied by a large number of people who do not use LTSS still yields a large number of people.
- **At least one-fifth of long-term services and supports users who spent down to Medicaid eligibility resided in the community using personal care services.** Among people using long-term services and supports, most policy makers and researchers have focused on spend down in nursing homes. While most people using long-term services and supports who spent down used nursing home care, paid personal care is associated with Medicaid spend down in a significant minority of cases.
- **People who spend down are disproportionately lower income and have substantially fewer assets than people who do not spend down.** People who spend down are disproportionately Black, Hispanic, unmarried, and have lower levels of education, all characteristics associated with lower levels of income and assets. This finding is inconsistent with the common assumption that the income and assets of people who spend down are typical of the population as a whole and that people who spend down are predominantly middle class. The financial status and trajectory over time of people who spend down is very different and much more limited than for people who do not spend down. While the income and assets of people who do not spend down increase over time, the income and assets of people who

spend down decline or are at best stable over time. Moreover, among people who spend down, few are asset rich and income poor. Because of the low levels of income and assets among people who spend down, they are unlikely to be purchasers of private long-term care insurance or to participate in other private-sector initiatives requiring substantial financial investment.

- **The rate of asset transfer among those who spent down to Medicaid eligibility was almost half that of those who did not spend down.** One of the most controversial aspects of financing for long-term services and supports is the extent to which people transfer their assets in order to appear artificially poor so that they can qualify for Medicaid. While a full-scale analysis of transfer of assets is beyond the scope of this study, approximately one-quarter of people who spent down transferred more than \$500 in assets to their children over the prior two years, which is about half the rate of financial transfers of people who *did not* spend down (46.9 percent). A slightly higher percentage of people who spend down transferred their houses to their children than did people who did not spend down, but the proportions were very small. The debate over this issue has not taken into account the high level of intergenerational transfer of assets that normally takes place between the older and younger generations in American society. In part, this may be because 85-year old disabled widows, the typical long-term care user may not have much in the way of assets to transfer.
- **Among respondents followed over the study period, the average time to spend down was 6.8 years.** Multivariate analyses did not find strong and consistently significant variation in time to spend down by categories of long-term services and supports use. Variables predicting a shorter time to spend down include lower income, lower home value, increasing age, fair or poor health, and a higher number of chronic conditions.

Like other analyses of Medicaid spend down, this study has limitations. The data are not able to distinguish between people who are eligible for full Medicaid benefits, including long-term services and supports, and people who participate in Medicare Savings Programs, who only receive help in paying Medicare premiums, deductibles, and coinsurance. Thus, to some extent the findings overstate the number of “true” Medicaid spend-down beneficiaries. Medicaid spend down is measured in three ways: as a percentage of people who were initially non-

Medicaid, as a percentage of people who were Medicaid eligible at any time during the observation period, and as a percentage of all people at baseline.

Additionally, although the study followed people for 10–12 years, the data on most respondents are incomplete in that the study does not follow them until death. Thus, some people identified as not spending down may, in fact, spend down at a later time. The Health and Retirement Study contains no information on health and long-term services and supports *expenditures*, including out-of-pocket expenditures. Thus, it is not possible to directly link transition to Medicaid with out-of-pocket expenditures for health and long-term services and supports. Since the survey is only every 2 years, information on events between surveys is limited; in particular, although fairly exact dates of nursing home use are available, precise dates on use of personal care are not available. Thus, it is not possible to identify the precise time of Medicaid spend down. Finally, information on people who are cognitively impaired and who die is derived from proxy respondents, often relatives, who may not know about specific long-term services and supports use or Medicaid eligibility. Finally, a limitation of the analysis is that the characteristics were determined at baseline, which was, on average, 6.8 years before spend down, and thus, might not be an accurate description of the respondent at the time of spend down.

The data in this report suggest that many typical assumptions about long-term services and supports and aging policy, more generally, need to be rethought.

The data in this report suggest that many typical assumptions about long-term services and supports and aging policy, more generally, need to be rethought. First, current policy initiatives in long-term services and supports focus on rebalancing the delivery system, largely ignoring the financing system that assures that catastrophic out-of-pocket expenses that force people onto welfare are routine events for people who use services. These issues have recently received major attention in Australia and the United Kingdom, where the respective governments have proposed major new initiatives to limit out-of-pocket costs (United Kingdom Department of Health, 2013; Australian Department of Health and Aging, 2012). The results of this study demonstrate that Medicaid spend down is something that happens to a significant number of people as they age. It is not a rare circumstance that only a few people experience.

The large proportion of people who spend down and who do not use long-term services and supports deserves additional analysis, but is likely the result of inadequate protection against out-of-pocket health care costs, pensions that are not indexed for inflation, and low Social Security benefits.

Second, Medicaid spend down is part of a larger issue reflecting the inadequacies of our retirement security system and is not just an issue of long-term services and supports. The large proportion of people who spend down and who do not use long-term services and supports deserves additional analysis, but is likely the result of inadequate protection against out-of-pocket health care costs, pensions that are not indexed for inflation, and low Social Security benefits.

Within long-term services and supports, spend down is an issue for people using home care and is not just an issue of use of nursing homes, as is commonly assumed. Preventing Medicaid spend down will require addressing more than the high costs of nursing home care.

Thus, promoting private-sector long-term care insurance is unlikely to have more than a marginal impact on Medicaid expenditures for long-term services and supports without deep subsidies to enable much more moderate income people to purchase policies.

Third, it has long been a strategy of many policymakers to promote private long-term care insurance with the expectation that savings to Medicaid would follow. However, the income and assets of people who spend down are considerably lower than commonly assumed, casting doubt as to whether the spend-down population could be expected to purchase long-term care insurance without very deep subsidies. Thus, promoting private-sector long-term care insurance is unlikely to have more than a marginal impact on Medicaid expenditures for long-term services and supports without deep subsidies to enable much more moderate income people to purchase policies. The Medicaid spend-down population and the population who can afford unsubsidized private long-term care insurance have little overlap.

References

- Adams, E. K., Meiners, M. R., & Burwell, B. O. (1992). A synthesis and critique of studies on Medicaid asset spend down. Retrieved from <http://aspe.hhs.gov/daltcp/reports/syncr.htm>
- American Health Care Association. (2012). LTC stats: Nursing facility operational characteristics report, December 2012 update. Retrieved from http://www.ahcancal.org/research_data/oscar_data/NursingFacilityPatientCharacteristics/LTC+STATS_HSNF_PA TIENT_2012Q4_FINAL.pdf.
- Australian Department of Health and Aging. (2012). Australian Government Response to the Productivity Commission's Caring for Older Australians Report and the Aged Care Reform Package. Canberra. Retrieved from: <http://www.health.gov.au/internet/main/publishing.nsf/Content/aged-aged-care-review-measures-techdoc>.
- Banarjee, S. (2012a). Expenditure patterns of older Americans, 2001–2009. EBRI Issue Brief #957. Washington, DC: Employee Benefit Research Institute. Retrieved from http://www.ebri.org/pdf/briefspdf/EBRI_IB_02-2012_No368_ExpPttns.pdf.
- Banarjee, S. (2012b). Time trends in poverty for older Americans between 2001–2009. Washington, DC: Employee Benefit Research Institute. Retrieved from http://www.ebri.org/pdf/notespdf/EBRI_Notes_04_Apr-12.EldPovty.pdf.
- Bassett, W. F. (2004). Medicaid's nursing home coverage and asset transfers. Federal Reserve Board Finance and Economic Discussion Series. Washington, DC: Federal Reserve Board. Retrieved from <http://www.federalreserve.gov/pubs/feds/2004/200415/200415pap.pdf>.

- Burwell, B. O., Adams, E. K., & Meiners, M. R. (1990). Spend-down of assets before Medicaid eligibility among elderly nursing-home recipients in Michigan. *Medical Care*, 28(4), 349-362.
- Centers for Medicare & Medicaid Services. (2011). MDS active resident information report. Retrieved from <http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MDSPubOlandResRep/activeresreport.html>.
- Coe, N. B. (2007). Financing nursing home care: New evidence on spend-down behavior. Tilburg, The Netherlands: Tilburg University. Retrieved from http://www.eea-eseem.com/files/papers/EEA-ESEM/2007/709/Coe_fnhc.PDF.
- Eiken, S., Sredl, K., Burwell, B., & Gold, L. (2011). Medicaid expenditures for long-term services and supports: 2011 update. Cambridge, MA: Thomson Reuters. Retrieved from <http://www.hcbs.org/files/208/10395/2011LTSSExpenditures-final.pdf>.
- Fronstin, P. (2006). Savings needed to fund health insurance and health care expenses in retirement. EBRI Issue Brief #295. Washington, DC: Employee Benefit Research Institute.
- Gottschalck, A., & Vornovytsky, M. (2012). Changes in household net worth from 2005 to 2010. Hyattsville, MD: U.S. Census Bureau. Retrieved from <http://www.census.gov/people/wealth/>.
- Johnson, R. W., & Mommaerts, C. (2010). Will health care costs bankrupt aging boomers? Washington, DC: The Urban Institute.
- Johnson, R. W., Toohey, D., & Wiener, J. M. (2007). Meeting the long-term care needs of the baby boomers: How changing families will affect paid helpers and institutions. Washington, DC: The Urban Institute.
- Johnson, R. W., & Wiener, J. W. (2006). A profile of frail older Americans and their caregivers. Washington, DC: The Urban Institute. Retrieved from http://www.urban.org/uploadedpdf/311284_older_americans.pdf.

- Kaiser Commission on Medicaid and the Uninsured. (2012). The diversity of dual eligible beneficiaries: An examination of services and spending for people eligible for both Medicaid and Medicare. Washington, DC: Kaiser Family Foundation. Issue paper No. 7895-02. Available from <http://www.kff.org/medicaid/upload/7895-02.pdf>
- Kemper, P., Komisar, H. L., & Alecxih, L. (2005). Long-term care over an uncertain future: What can current retirees expect? *Inquiry*, 42(4), 335-350.
- Lee, J., Kim, H., & Tanenbaum, S. (2006). Medicaid and family wealth transfer. *The Gerontologist*, 46(1).
- Liu, K., Doty, P., & Manton, K. (1990). Medicaid spenddown in nursing homes. *The Gerontologist*, 30(1), 7-15.
- Mehdizadeh, S., Nelson, I., & Applebaum, R. (2006). Nursing home use in Ohio: Who stays, who pays? Miami, OH: Miami University. Retrieved from <http://www.scripps.muohio.edu/research/publications/NHUse.html>.
- MetLife Mature Market Institute. (2012). Market survey of long-term care costs. New York, NY: MetLife Mature Market Institute.
- Michaud, P.-C. , van Soest, A. (2008). Health and wealth of elderly couples: Causality tests using dynamic panel data models," *Journal of Health Economics*, 27(5): 1312-1325, 2008
- Mor, V., Intrator, O., & Laliberte, L. 1993. Factors affecting conversion rates to Medicaid among new admissions to nursing homes. *Health Services Research*, 28(1), 1-25.
- Moses. 1990. The fallacy of impoverishment. *The Gerontologist*, 30(1), 21-25.
- Ng, T., Wong, A., & Harrington, C. (2012). Home and community-based services: Introduction to Olmstead Lawsuits and Olmstead Plans. San Francisco: UCSF National Center for Personal Assistance Services. Retrieved from http://www.pascenter.org/olmstead/downloads/Olmstead_report_2012.pdf.
- Norton, E. C. 1995. Elderly assets, Medicaid policy, and spend-down in nursing homes. *Review of Income and Wealth*, 41, 309-329.

- O'Brien, E. (2005) . Medicaid's coverage of nursing home costs: Asset shelter for the wealthy or essential safety net? Washington, DC: Georgetown University. Available from: <http://lrc.georgetown.edu/pdfs/nursinghomecosts.pdf>.
- O'Keeffe, J., Saucier, P., Jackson, B., Cooper, R., McKenney, E., Crisp, S., & Moseley, C. (2010). Understanding Medicaid home and community services, a primer, 2010 edition. Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. Available from: <http://aspe.hhs.gov/daltcp/reports/2010/primer10.htm>.
- Poterba, J. M., Venti, S. F., & Wise, D. (2012). Were they prepared for retirement? Financial status at advanced ages in the HRS and AHEAD cohorts. NBER Working Paper 17824. Cambridge, MA: National Bureau of Economic Research. Retrieved from http://www.nber.org/papers/w17824.pdf?new_window=1.
- Sloane, F. A., & Shayne, M. W. (1993). Long-term care, Medicaid and impoverishment of the elderly. *The Milbank Quarterly*, 71, 575-600.
- Smith, J.P. (1999). Healthy bodies and thick wallets: The dual relationship between health and economic status. *Journal of Economic Perspectives*,13(2): 145–166.
- Smith, J.P. (2005). Consequences and predictors of new health events." In D. Wise edited, *Analyses in the Economics of Aging*, Chicago; University of Chicago Press, 213–240.
- Temkin-Greener, H., Meiners, M. R., Petty, E., & Szydlowski, J. (1993). Spending-down to Medicaid in the nursing home and in the community. A longitudinal study from Monroe County, New York. *Medical Care Research and Review*, 31(8), 663-679.
- University of Michigan Institute for Social Research. (2012). Health and Retirement Study: A longitudinal study of health, retirement and aging. Ann Arbor, MI: University of Michigan. Retrieved from <http://hrsonline.isr.umich.edu/index.php>.
- United Kingdom Department of Health. (2013). Policy statement on care and support funding reform and legislative requirements. London. <http://www.dh.gov.uk/health/files/2013/02/Policy-statement-on-funding-reform.pdf>.

- Waidmann, T., & Liu, K. (2006). Asset transfer and nursing home use: Empirical evidence and policy significance. Issue paper No. 7847. Washington, DC: Kaiser Commission on Medicaid and the Uninsured, Kaiser Family Foundation.
- Walker, L., & Accius, J. (2010). Access to long-term services and supports: A 50-state survey of Medicaid financial eligibility standards. Washington, DC: AARP. Retrieved from http://assets.aarp.org/rgcenter/ppi/ltc/i44-access-ltss_revised.pdf.
- Wiener, J., Sullivan, C. M., & Skaggs, J. (1996). Spending down to Medicaid: New data on the role of Medicaid in paying for nursing home care. Washington, DC: AARP Public Policy Institute.
- Wilkinson, R.G. (1996). *Unhealthy Societies: The Afflictions of Inequality*. London: Routledge.