

# MEDICAID AND THE ELDERLY

BY MARIACRISTINA DE NARDI, ERIC FRENCH, AND JOHN BAILEY JONES\*

---

## Introduction

Medicaid, the government program that covers the medical expenses of the poor, spends over \$80 billion a year on individuals age 65 and over.<sup>1</sup> Elderly beneficiaries include both those with low incomes throughout their retirement and those who become “medically needy” – who satisfy Medicaid means tests after incurring high health care expenses. Medicaid thus serves not just the poor, but also relatively well-off retirees impoverished by costly medical expenses. This *brief* summarizes a recent study that assesses, by income group, the prevalence of Medicaid coverage among single retirees (i.e. those never married, divorced, or widowed), the amount that Medicaid spends on them, and the value that these individuals place on the program’s benefits.<sup>2</sup>

The discussion proceeds as follows. The first section provides a quick primer on Medicaid and explains how high out-of-pocket costs can make middle- and upper-income individuals eligible for the program. The second section looks at the percentage of single retirees receiving Medicaid by income. The third section details the amount of Medicaid expenditures for these individuals. The fourth section considers how much individuals value the Medicaid program by estimating how much they would need to be compensated for a reduction in benefits and how much they would be willing to pay for an expansion in benefits. The final section concludes that: 1)

Medicaid provides significant benefits to all income groups; and 2) typical single retirees would not view either a significant reduction or a significant increase in the size of the program as financially beneficial.

## Medicaid: A Quick Primer

Two major programs help the elderly with medical bills. The first is Medicare, a federal program that provides health insurance to almost all individuals age 65 and over. The second is Medicaid, a joint federal-state program that pays medical expenses for those with limited means.

Medicaid covers two main groups of elderly beneficiaries – the “categorically needy” and the “medically needy.” Categorically needy beneficiaries are individuals with incomes and assets below specified thresholds. While these thresholds vary by state, people eligible for federal Supplemental Security Income (SSI) benefits generally qualify as categorically needy Medicaid beneficiaries. To be eligible for SSI, individuals must be age 65 or older or have a severe impairment that meets the Social Security Administration’s definition of disability. In addition, individuals must have less than \$2,000 in countable liquid assets (\$3,000 for couples) and countable incomes of less than \$721 a month (\$1,082 for couples).<sup>3</sup>

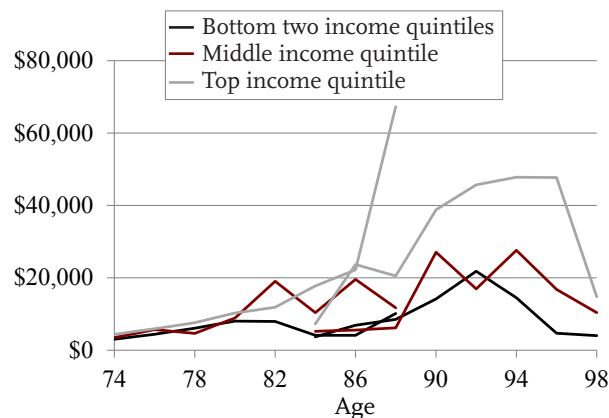
---

\* Mariacristina De Nardi and Eric French are both professors of economics at University College London and senior economists at the Federal Reserve Bank of Chicago. John Bailey Jones is associate professor of economics at the State University of New York at Albany. This *brief* is a summary of a recent study (De Nardi, French, and Jones 2013).

Thirty-two states also extend Medicaid to medically needy individuals.<sup>4</sup> Recipients must again have assets below limits that vary by state but are generally identical or similar to the SSI asset limits. The income test, however, is income net of out-of-pocket medical expenses. After paying their medical bills, recipients must have incomes below their state's "medically needy income limit," which tends to be below the SSI income limit. In half of all states with medically needy programs, recipients can have incomes, net of medical expenses, of no more than half of the federal poverty level – or \$486 a month for individuals and \$655 a month for couples.<sup>5</sup>

The most common impoverishing expense is nursing home care, which averages about \$75,000 a year.<sup>6</sup> Medicaid ends up financing the care of 70 percent of nursing home residents, and the cost of such care accounts for over 60 percent of annual Medicaid spending on the elderly. To illustrate how some middle- and upper-income individuals end up on Medicaid, Figure 1 shows the 90th-percentile level of out-of-pocket health costs by income quintile for the sample in this study.<sup>7</sup> The figure depicts results for two age cohorts of each quintile in order to show what happens over a longer age span, as further explained in the next section. As people age, costs increase to impoverishing levels for a significant number of middle- and upper-income individuals, triggering eligibility for Medicaid coverage.

FIGURE 1. 90TH PERCENTILE OUT-OF-POCKET MEDICAL EXPENDITURES BY AGE AND INCOME QUINTILE, 2013 DOLLARS



Source: De Nardi, French, and Jones (2013).

## What Percentage of Older Individuals Receive Medicaid?

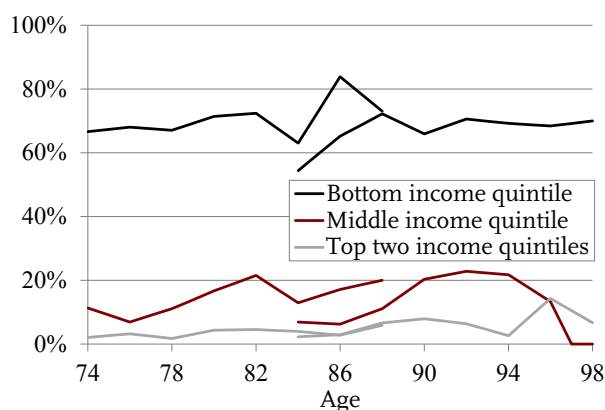
This study is based on the *Assets and Health Dynamics of the Oldest Old* (AHEAD) dataset – the responses of a panel of non-institutionalized elderly individuals, age 70 or older in 1994, who have been interviewed every two years since then. The study uses data collected through 2010. To eliminate complications arising from changes in employment status and family size, the sample includes only fully retired single individuals – never married, divorced, or widowed individuals who no longer work. The resulting sample of 3,243 single retirees includes 588 men and 2,655 women, 370 of whom were still alive in 2010.

To assess the distribution of Medicaid benefits by income, the study divides the sample into quintiles based on "permanent income" – the retiree's Social Security benefits, defined benefit pensions, veteran's benefits, and annuities – averaged over all years in which the individual is observed.<sup>8</sup> Average permanent incomes, in 2013 dollars, range from about \$6,000 a year in the bottom quintile to about \$27,000 in the top income quintile. Median financial assets for the bottom and top quintiles, in 2013 dollars, are zero and about \$230,000, respectively. While these average incomes might seem low, especially for higher-income individuals, note that permanent income excludes income from assets. Moreover, single retirees age 70 and over are also less well-off than the entire population age 65 and over, as couples, those who work, and those younger than 70 all have higher incomes.

The AHEAD survey provides reliable data on Medicaid receipt over the 14 years from 1996-2010. To assess the share of individuals receiving benefits over a much longer course of retirement, the study divides each income group into sub-groups based on the respondent's age in 1996. It then calculates the share of individuals in each subgroup receiving benefits at each age over the 14-year period. Figure 2 (on the next page) shows the results for two of the sub-groups, with the experience over these 14 years of individuals with an average age of 74 in 1996 on the left and an average age of 84 in 1996 on the right.<sup>9</sup> The two lines combined show the share of individuals in different income quintiles receiving benefits from Medicaid from age 74 to age 98. As no one in the top income quintile received Medicaid benefits at relatively young ages, the figure combines the experience of the top two income quintiles.

Medicaid receipt, not surprisingly, is inversely related to income. Between 60 and 70 percent of those in the lowest income quintile get benefits. Most are categorically needy, eligible for Medicaid based on their income and assets. Benefit receipt in the higher-income quintiles, by contrast, tends to rise with age from zero to about 10 percent as an increasing share of higher-income individuals qualify for Medicaid under the medically needy provision. This rise in benefit receipt for higher-income individuals is even larger for older cohorts (not depicted in Figure 2), with 20 percent receiving Medicaid in their late nineties.

FIGURE 2. PERCENTAGE OF INDIVIDUALS RECEIVING MEDICAID BY AGE AND INCOME QUINTILE

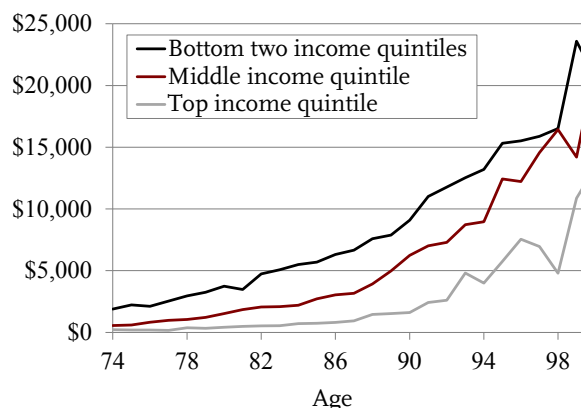


Source: De Nardi, French, and Jones (2013).

## How Much Does Medicaid Spend on Older Individuals?

Data on the amount of Medicaid expenditures by income and age group come from the *Medicare Current Beneficiary Survey*. Figure 3 shows the results of a simulation estimating average Medicaid expenditures by age and income quintile – the average expenditure in each income quintile for those still alive at that age.<sup>10</sup> The largest expenditures at essentially all ages go to those in the lowest income quintiles. But as medical expenses rise with age, more individuals in the higher income quintiles incur large expenses and qualify for benefits under the medically needy provision. At very old ages, average expenditures are significant in all income quintiles. Higher-income individuals are also more likely to live to these ages when average expenditure per recipient spikes.

FIGURE 3. ESTIMATED AVERAGE MEDICAID EXPENDITURES BY AGE AND INCOME QUINTILE, 2013 DOLLARS



Source: De Nardi, French, and Jones (2013).

Table 1 presents estimates of the present value at age 74 of average lifetime Medicaid expenditures and out-of-pocket medical expenditures by income quintile.<sup>11</sup> It shows that lifetime Medicaid expenditures are greatest for those in the lowest income quintiles. But Medicaid also provides some support for those in the middle and higher quintiles. At age 74, the present value of Medicaid expenditures is nearly half the present value of out-of-pocket expenditures of those in the middle income quintile and 7 percent of those in the highest income quintile.

TABLE 1. LIFETIME MEDICAID AND OUT-OF-POCKET MEDICAL EXPENDITURES BY INCOME QUINTILE, PRESENT VALUE AT AGE 74 IN 2013 DOLLARS

Income quintile	Medicaid expenditures	Out-of-pocket expenditures	Medicaid as % of out-of-pocket
Bottom	\$30,100	\$8,900	338%
Fourth	22,900	20,000	115
Third	15,000	33,000	45
Second	6,600	49,300	13
Top	5,100	71,100	7

Source: De Nardi, French, and Jones (2013).

Middle- and higher-income individuals not only benefit from the expenditures that Medicaid makes on their behalf. They also benefit from the insurance that Medicaid provides, knowing that health care costs will be covered should they run short of money. Previous research has shown that the elderly hold on to their assets as a precautionary reserve against the risk of incurring high future medical expenses; and in states with medically needy Medicaid programs and lenient eligibility rules, retirees hold less in reserve and use more of their assets for current consumption. The insurance that Medicaid provides as a payer of last resort thus benefits well-off retirees even if the program never makes any payments for their care.<sup>12</sup>

## How Much Do Individuals Value Medicaid?

To determine the value of Medicaid benefits to individuals in different income quintiles, a model is constructed to estimate how much these individuals would need to be compensated to be indifferent to a reduction in benefits, and how much they would be willing to pay for an increase in benefits. The model assumes that individuals are lifetime expected utility maximizers with stable preferences and rational expectations about the various risks and alternatives they face. They thus respond to a cut in Medicaid benefits, and potentially higher future medical expenses, by reducing their current consumption to have more resources to pay for care down the road. An increase in Medicaid benefits has the opposite effect. Their specific responses to potential changes in benefits depend on key parameters in their utility function – their discount rate, bequest motive, and

willingness to trade current medical and non-medical consumption for a reduced risk of lower consumption down the road. Since the model uses parameters estimated from the behavior of individuals in the sample, it allows for estimates of the value that individuals in different income quintiles place on increases or decreases in the generosity of the Medicaid program.

Table 2 shows the results, in present value terms at age 74, of a 25-percent reduction and of a 10-percent increase in Medicaid's generosity. The left-hand columns show the results for the benefit reduction scenario – how much individuals would need to be compensated to be indifferent to the benefit reduction compared to the dollar amount of the reduction. All income quintiles would need to receive an amount that *exceeds* the size of the benefit reduction in order to be indifferent to it. This pattern is particularly striking for individuals in the top two quintiles, who would need compensation that far exceeds the amount of the benefit reductions. The reason is that, for the higher-income quintiles, the amount of the benefit loss is low but the value of the insurance they provide is high. The benefit loss is low because it is the present value of costs that are primarily incurred 15 or so years down the road by a small portion of the quintile alive at age 74. The insurance value is high because high-income individuals with high current consumption are willing to sacrifice a significant portion of that consumption to avoid the risk of very low consumption at advanced ages.

The right-hand columns in Table 2 show the effect of a 10-percent increase in Medicaid generosity. To receive the corresponding benefit increase, individuals in all but the highest quintile are willing to pay *less* than the amount of the increase and would forgo such an expansion if they had to pay its cost.

TABLE 2. ESTIMATED VALUE OF MEDICAID TO INDIVIDUALS, MEASURED BY COMPENSATION NEEDED FOR BENEFIT REDUCTION AND WILLINGNESS TO PAY FOR BENEFIT INCREASE, 2013 DOLLARS

Income quintile	25% reduction in Medicaid generosity		10% increase in Medicaid generosity	
	Compensation needed	Benefit reduction	Willingness to pay	Benefit increase
Bottom	\$13,000	\$9,900	\$2,000	\$4,700
Fourth	7,900	7,800	1,700	3,600
Third	7,300	5,200	1,000	2,100
Second	8,600	3,700	1,000	1,600
Top	10,700	1,900	1,600	800

Source: De Nardi, French, and Jones (2013).

## Conclusion

Medicaid is designed to cover the medical expenses of the poor, and Medicaid payments for the elderly primarily go to lower-income beneficiaries. But higher income retirees also get significant benefits. They tend to live longer and face higher medical needs in very old age, which can result in them ending up on Medicaid. The program's role as payer of last resort allows well-off retirees to use more of their assets for current consumption and hold less as reserves. The results of a model developed to estimate the value of Medicaid benefits to single retirees finds that retirees in all income groups value the current level of Medicaid insurance at more than its cost, but most value a program expansion at less than its cost.

## Endnotes

- 1 Kaiser Commission on Medicaid and the Uninsured (2010).
- 2 De Nardi, French, and Jones (2013).
- 3 Kaiser Commission on Medicaid and the Uninsured (2012); Social Security Administration (2014). Excluded from the asset test are the house that a recipient lives in, household goods and personal effects, and a vehicle used by the recipient. Excluded from the income test is \$20 of monthly income from any source, the first \$65 of monthly income from work, and one half of monthly income from work above \$65.
- 4 The study summarized in this *brief* does not address any potential changes related to the Affordable Care Act.
- 5 Kaiser Commission on Medicaid and the Uninsured (2012); U.S. Department of Health and Human Services (2014).
- 6 States without the medically needy provision cover nursing home residents through alternative provisions, which in practice are quite similar. See De Nardi et al. (2012).
- 7 As out-of-pocket expenses in the lowest quintile vary little until very late in life, the figure combines the experience of the bottom two income quintiles.
- 8 "Permanent" retirement income, which excludes asset income, is related directly to the individual's lifetime income.
- 9 The full study presents results for four sub-groups; see De Nardi, French, and Jones (2013).
- 10 The simulation is for the youngest age group in the sample, those age 72 to 76 in 1994. For details on the simulation, see De Nardi, French, and Jones (2013).
- 11 The present value calculation used a 4-percent discount rate. For details on the simulation that produced the estimates in Table 1, see De Nardi, French, and Jones (2013).
- 12 Brown, Coe, and Finkelstein (2007); De Nardi, French, and Jones (2009, 2010); Gardner and Gilleskie (2006); Hubbard, Skinner, and Zeldes (1995).

## References

- Brown, Jeffrey R., Norma B. Coe, and Amy Finkelstein. 2007. "Medicaid Crowd-Out of Private Long-Term Care Insurance Demand: Evidence from the Health and Retirement Survey." in James M. Poterba, ed., *Tax Policy and the Economy*. Cambridge, MA: MIT Press.
- De Nardi, Mariacristina, Eric French, and John Bailey Jones. 2013. "Medicaid Insurance in Old Age." Working Paper 19151. Cambridge, MA: National Bureau of Economic Research.
- . 2010. "Why Do the Elderly Save? The Role of Medical Expenses." *Journal of Political Economy* 118(1): 39–75.
- . 2009. "Life Expectancy and Old Age Savings." *American Economic Review: Papers and Proceedings* 99(2):110–115.
- De Nardi, Mariacristina, Eric French, John Bailey Jones, and Angshuman Gopptu. 2012. "Medicaid and the Elderly." *Economic Perspectives* 1Q: 17-34.
- Gardner, Lara and Donna Gilleskie. 2006. "The Effects of State Medicaid Policies on the Dynamic Savings Patterns of the Elderly." Working Paper 12208. Cambridge, MA: National Bureau of Economic Research.
- Hubbard, R. Glenn, Jonathan Skinner, and Stephen P. Zeldes. 1995. "Precautionary Saving and Social Insurance." *Journal of Political Economy* 103(2): 360–399.
- Kaiser Commission on Medicaid and the Uninsured. 2010. *Medicaid: A Primer*. Menlo Park, CA: The Henry J. Kaiser Family Foundation.
- . 2012. *The Medicaid Medically Needy Program: Spending and Enrollment Update*. Menlo Park, CA: The Henry J. Kaiser Family Foundation.
- U.S. Social Security Administration. 2014. "Social Security Update 2014." Publication No. 05-10003. Washington, DC.
- U.S. Department of Health and Human Services. 2014. "2014 Poverty Guidelines." Washington, DC.

---

## About the Center

The mission of the Center for Retirement Research at Boston College is to produce first-class research and educational tools and forge a strong link between the academic community and decision-makers in the public and private sectors around an issue of critical importance to the nation's future. To achieve this mission, the Center sponsors a wide variety of research projects, transmits new findings to a broad audience, trains new scholars, and broadens access to valuable data sources. Since its inception in 1998, the Center has established a reputation as an authoritative source of information on all major aspects of the retirement income debate.

## Affiliated Institutions

The Brookings Institution  
Massachusetts Institute of Technology  
Syracuse University  
Urban Institute

## Contact Information

Center for Retirement Research  
Boston College  
Hovey House  
140 Commonwealth Avenue  
Chestnut Hill, MA 02467-3808  
Phone: (617) 552-1762  
Fax: (617) 552-0191  
E-mail: [crr@bc.edu](mailto:crr@bc.edu)  
Website: <http://crr.bc.edu>