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How Redistributive Are Public Health Care Schemes? Evidence from Medicare and Medicaid in Old Age

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The great majority of American households aged 65 and older receive health care benefits from Medicare, a mostly free single payer program that covers most health care services. Furthermore, many older households also receive benefits from Medicaid, which covers the health care costs of those with limited financial resources. Both programs are funded out of insurance premia and tax revenues. This paper estimates the health care benefits received from these programs and the taxes and insurance premia paid to finance these benefits. Our findings contribute to the debate on reforming health care. Which income groups receive the most health care benefits? How redistributive are the benefits received and the taxes paid to finance those benefits? These are important questions to answer before reforming the programs currently in place. These questions are also of importance as some U.S. policymakers advocate a single payer health care scheme. In this paper we seek to fill this gap. We focus on households 65 and older, a group responsible for 33% of all medical care received, whose expenditures are on average 2.6 times higher than the national average, and who rely much more on public funding than the average household.

To answer these questions, we use data from the Health and Retirement Study matched to administrative Medicare, Medicaid, and Social Security earnings records, and supplemented with imputations using the Medical Expenditure Panel Survey. We estimate the distribution of lifetime medical benefits received and the distribution of lifetime taxes paid for that care among the cohort who turned 65 between 1999 and 2004. We forecast future health, longevity, and health care benefits, allowing us to infer the lifetime Medicare and Medicaid benefits received by this cohort. We also calculate the total payroll, state, and federal taxes paid by this cohort that went to fund Medicare and Medicaid. To do so, we calculate federal and state tax payments for each household in each year, then multiply

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these payments by the shares of aggregate federal and state taxes in that year that went toward paying Medicare and Medicaid for those older than 65.

We estimate models of total medical spending. In addition to spending on medical care paid out of pocket, by Medicare, or by Medicaid, we also impute Medicare Part C, private insurance, and other public insurance payments using data from the Medical Expenditure Panel Survey, meaning that our approach captures all payors over a long panel. In addition, we also estimate the shares of total spending from different payors. Thus, our framework can be extended to not only consider the amount of redistribution in the current system, but also, for example, how the amount of redistribution would change as a function of changes in reimbursement rate policy.

For the cohort who turned 65 between 1999 and 2004, we find that Medicare and Medicaid benefits received are 1.7 times greater among those in the top lifetime income quintile than among those in the bottom quintile, in large part because they live longer. Nonetheless, high-income people pay more in the way of taxes and, as a result, there are net transfers to those at the bottom of the income distribution. For example, we calculate that households in the top income quintile contribute through taxes and Medicare insurance contributions 7.5 times more than those in the bottom quintile. Those at the top of the income distribution contribute $248,000 on average to Medicare and Medicaid, and receive $401,000 in benefits over their lives. Those at the bottom of the income distribution contribute $33,000 on average to Medicare and Medicaid, and receive $229,000 in benefits over their lives. The largest beneficiaries of Medicare and Medicaid are those in the middle of the income distribution, as these people live long yet pay modest taxes. For example, those in the middle 20% of the income distribution contribute $82,000 on average to Medicare and Medicaid, and receive $337,000 in benefits over their lives.

All income groups within the cohort we study are net beneficiaries from Medicare and Medicaid. On average this cohort's lifetime tax contribution did not cover the medical benefits it received. Put differently, the key source of redistribution is from younger cohorts to the cohort we study. Thus, for the cohort we study, cross-cohort redistribution (from young to old) is greater than within-cohort redistribution (from rich to poor). ❖

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