Labor supply responses to in-kind transfers: the case of Medicaid

I develop a model of labor supply in the presence of an in-kind transfer with an unknown value and use labor supply responses to Medicaid to identify the value of coverage, which has been overlooked in the literature, jointly with other behavioral parameters. Medicaid is one of the largest in-kind transfer programs in the United States, providing health insurance to low-income families. Despite the size of the program and the cost of benefits, previous work has found little evidence of labor supply responses to Medicaid and there are few estimates of its value. I identify the value of Medicaid that explains these small labor supply responses.

To do this, I study the earnings threshold created by an in-kind transfer, in which earning below a threshold qualifies a household for full benefits and earning above disqualifies a household for any benefits. I quantify the number of households that respond to this threshold by reducing their earnings to gain coverage, which depends on the value of coverage. Previous work has used similar methods to study labor supply responses to taxes and transfer programs by estimating the number of people that respond to abrupt changes in marginal tax rates.

Changes in these thresholds at the state level allow me to identify four parameters: the elasticity of earnings with respect to the marginal tax rate, the cost to adjust earnings, the additional cost to adjust earnings while maintaining eligibility for Medicaid, and the value of Medicaid. When the threshold increases, beneficiaries can increase their earnings and maintain coverage, and their choice depends on adjustment costs. When the threshold decreases, households must reduce their earnings to maintain coverage. Whether households reduce their earnings to maintain eligibility depends on adjustment costs and the value of Medicaid. This variation identifies the value to beneficiaries and adjustment costs.

I study households in 2004-2005 that face an earnings threshold at 100% of the federal poverty line (FPL). I use Survey of Income and Program Participation and Current Population Survey earnings data. In 2004, six states had a Medicaid threshold at 100% of FPL, and three of those states moved this threshold in 2005, providing an opportunity to observe earnings before and after the threshold changes location.

I estimate that families with earnings up to $802 above the earnings threshold are willing to reduce their earnings to qualify for benefits. I estimate a value of Medicaid of $614, which is about 24% of its cost to the government. I also estimate an elasticity of earnings of 0.012, which implies that low-income workers do not respond to changes in marginal tax rates. Both estimates are similar to those in the literature.

Households also face significant adjustment costs. My estimate implies that, in order to adjust their earnings, households must pay a utility cost equivalent to $258. There is an additional cost of $299 that affects households adjusting earnings while maintaining benefits, which may reflect the cost of verifying earnings through the program. My results are similar across the SIPP and CPS.

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