

## **The Effect of Medicaid Reimbursement Policy on Downstream Medicaid Spending: The Case of Cochlear Implants**

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### KEY FINDINGS AND POLICY IMPLICATIONS

This paper examines the effect of Medicaid reimbursement policy on the number of people receiving cochlear implants for hearing loss, based on differences in Medicaid policy across states. It also analyzes how the receipt of a cochlear implant affects Medicaid expenditures in the subsequent three years. The project uses data from 1999-2009 Medicaid Analytic eXtract (MAX) in seven states (Illinois, Massachusetts, Maryland, Michigan, Minnesota, Texas, and Washington). The paper finds that:

- States differ significantly in how much their Medicaid programs reimburse for cochlear implants. For example, Michigan would have covered \$38,800, on average, for the pool of cochlear implantees in 2001, while Maryland would have covered \$118,800, on average, for the same pool of patients.
- Over time, Minnesota's reimbursement policy remained fairly stable over the study period, with the average expenditures varying from \$58,800 to \$79,600, while the rest of the states show up to three-fold increases in Medicaid reimbursement for cochlear implants.
- Somewhat surprisingly, higher Medicaid reimbursement actually leads to lower cochlear implantation rates. In the model without state and year fixed effects, for example, a \$100 increase in Medicaid reimbursement, other things equal, decreases the likelihood of receiving a cochlear implant by about 4 percent.
- Having a cochlear implant is estimated to reduce overall Medicaid expenditures in the next three years by almost \$3000.

Cochlear implants are very effective at improving hearing, especially among young children, and have been shown to improve a variety of measures of quality of life. The policy relevance of the study is in demonstrating the value of the procedure, not just for improving functioning at the individual level, but also in reducing subsequent Medicaid spending.

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