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Has public health insurance for older children reduced disparities in access to care and health outcomes?

Janet Currie[a,b,*], Sandra Decker[c,1], Wanchuan Lin[d,2]

[a] Economics Department, Columbia University, 1014 International Affairs Building, MC 3308, 420 West 118th Street, New York, NY 10027, United States
[b] NBER, United States
[c] National Center for Health Statistics, Centers for Disease Control and Prevention, 3311 Toledo Road, Hyattsville, MD 20782, United States
[d] Guanghua School of Management, Peking University, Guang Hua Building, Room 451, Beijing 100871, China

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ABSTRACT

This paper investigates the effects of expanding public health insurance eligibility for older children. Using data from the National Health Interview Surveys from 1986 to 2005, we first show that although income continues to be an important predictor of children's health status, the importance of income for predicting health has fallen for children 9–17 in recent years. We then investigate the extent to which the dramatic expansions in public health insurance coverage for these children in the past decade are responsible for the decline in the importance of income. We find that while eligibility for public health insurance unambiguously improves current utilization of preventive care, it has little effect on current health status. However, we find some evidence that Medicaid eligibility in early childhood has positive effects on future health. This may indicate that adequate medical care early on puts children on a better health trajectory, resulting in better health as they grow.

1. Introduction

Children of wealthier parents are healthier than other children. This relationship is apparent in key indicators of child health, such as activity limitations, asthma, and mental health problems (Currie and Lin, 2007; Newacheck, 1994). Poor health in childhood is likely to affect adult well-being both directly, through its effects on health, and indirectly, through inhibiting the child's accumulation of human capital. Since 17% of all U.S. children under age 18 live in families with income below the Federal poverty level, it is essential to have a better understanding of the mechanisms underlying the relationship between income and health (U.S. Bureau of the Census, 2004).

Expanding health insurance for low-income children continues to be a main goal of U.S. health policy for children. The primary policy tool aimed at meeting this goal has been liberalization of the eligibility criteria for public health insurance. Previous research has shown that expansions in eligibility of infants and young children for public health insurance have been effective in improving their health and access to care (Currie and Gruber, 1996b; Dafny and Gruber, 2005; Mathematica Policy Research Inc., et al., 2005).

This paper investigates the effects of expanding public health insurance eligibility on the health of older U.S. children. Older children are an especially interesting group because income becomes an increasingly important determinant of health

* Corresponding author at: Economics Department, Columbia University, 1014 International Affairs Building, MC 3308, 420 West 118th Street, New York, NY 10027, United States. Tel.: +1 212 854 4520; fax: +1 212 854 8059.
E-mail addresses: Janet.Currie@columbia.edu (J. Currie), SDecker@cdc.gov (S. Decker), WLin@gsm.pku.edu.cn (W. Lin).
[1] Tel.: +1 301 458 4748; fax: +1 301 458 4693.
[2] Tel.: +86 10 62753820; fax: +86 10 62751463.

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as children grow older. We show, using data from the National Health Interview Surveys for 1986 to 2005, that the importance of income for predicting health has fallen for children 9–17 in recent years.

What explains this decline in the importance of income? It is natural to think of the dramatic expansions in public health insurance coverage for these children which have occurred over the past decade. If access to health insurance mitigates the health effects of low income, then one might expect to find that the relationship between income and health has weakened among the targeted older children. This improvement in health could stem either from the contemporaneous effects of gaining health insurance coverage, or from the lagged effects of having been covered at younger ages. Thus, in our analysis, we look at both present and lagged effects of public health insurance expansions.

The paper proceeds as follows. First, we present some background about the Medicaid expansions, describe the data, and document the reduction in the importance of income for the health of older children after 1996. Then, we explore the extent to which expansions of public health insurance eligibility to these children have been responsible for improvements in their health and access to care.

We find that while eligibility for public health insurance unambiguously improves current utilization of preventive care, it has little effect on current health status. However, we find some evidence that Medicaid eligibility in early childhood has positive future effects on health. This may indicate that adequate medical care early on puts children on a better health trajectory, resulting in better health at older ages.

2. Background

As of the early 1980s, public health insurance under the Medicaid program was available primarily to children of welfare mothers, which meant that the income cutoffs for program eligibility were below the poverty line in many states. Beginning in 1984, Congress expanded Medicaid coverage to pregnant women, infants and younger children not on welfare. By April 1990, states were required to offer coverage to children below age six in families with income up to 133% of the federal poverty line. This meant that young children had access to public health insurance while older children in similarly situated families did not.

However, since the passage of the Omnibus Budget Reconciliation Act (OBRA) of 1990, the focus of the Medicaid expansions has shifted to older children. OBRA 1990 required states to increase the eligibility of older children by covering one additional year of age per year. Starting in July 1991, states were required to provide coverage to all children under age 19, who were born after September 1983 and lived in households with incomes less than 100% of the Federal Poverty Line. Hence, all poor children under age 18 were covered by 2001.

The State Child Health Insurance Program (SCHIP) initiated in 1996 provided an additional source of public health insurance coverage for low-income children. Under SCHIP, states have had the option of extending Medicaid, creating a new SCHIP insurance program, or offering a combination. Medicaid and SCHIP work somewhat differently. Medicaid is an entitlement, which means that all eligible children are covered, while SCHIP is a block grant. Under SCHIP, if the states run out of money, then they put people on a waiting list.

Still, the evidence suggests that Medicaid and SCHIP have had similar impacts on the lack of insurance among children (Lo Sasso and Buchmueller, 2004). In analyses which are not shown below, we tried to distinguish between the effects of Medicaid and SCHIP programs, but did not see differential impacts on the outcomes we examine. Consequently, in this paper we do not distinguish between these two programs.

Table 1 shows the weighted average of the income eligibility cutoffs for public health insurance across states as a percentage of the federal poverty line for each year and child age group.[3] We initially examined four age groups: 0–3, 4–8, 9–12, and 14–17 in order to divide children into roughly equally sized groups. The Medicaid income eligibility cutoff differs by state, year, child age, and in some cases it also depends on a child's birth month and year. For simplicity, the table only shows the average cutoffs aggregated by child age group over years, weighted by the population in each cell. As is apparent from Table 1, Medicaid expansions for younger children started before expansions for older children. The first year in which the average cutoff for 0–3-year-old children reached 100% of the federal poverty line was 1989. In 1990, the average cutoff for 4–8-year-old children reached 100%, while the average cutoffs for children 9–12 and 13–17 reached 100% in 1994 and 1997, respectively. If contemporaneous health insurance is a major determinant of children's health status, then one might expect to see health improve in the same staggered way across these age groups.

Even though the Medicaid expansions started later for older children, the expansion for older children in the past 10 years has been dramatic. In 1996, the average child aged 0–3 was covered if his or her household income was under 155% of the Federal poverty line (FPL), but the average 12–17-year-old child was only covered if he or she lived in a household with income under 94% of the FPL. However, due to the rapid expansions for older children in the past 10 years, by 2005 the eligibility cutoffs had converged to 220% of the FPL for all children.

As a source of identification, we rely on the fact that the expansions in Medicaid/SCHIP eligibility for older children relative to younger children have happened at different times and with different magnitudes in different states. Although there is significant variation across child age groups over time, Table 1 masks the fact that there is also a great deal of variation

[3] Data on eligibility are collected from several sources including National Governors Association (2003), Cohen-Ross and Cox (2005), and Rosenbach et al. (2001).