How Does Extending Public Health Insurance Affect Hospitalizations?  
The Case of CHIP Expansions for Children

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This paper examines how the expansion of health insurance coverage that happened through the Children's Health Insurance Program (CHIP) affected pediatric hospitalizations. This question is important for evaluating past policy decisions as well as anticipating what could happen from future reforms to cover more children through public programs. Insuring children could lead to a lower probability of hospitalization through access to timely ambulatory care for preventable conditions, and use of more appropriate physician care rather than emergency room use. Health insurance could also lead to greater use of hospitals for children who are ill through the “access” effect of reduction of out of pocket costs for patients and increase in reimbursement for providers. Conditional on hospitalization, health insurance could lead to a decrease in intensity of services, if children are healthier at admission due to better preventive care. Health insurance could also lead to an increase in the intensity of services because of the provider reimbursements that accompany an insured hospitalization. Exploiting variation in public health insurance eligibility rules for children by age, state, and year, we investigate net impacts of the coverage expansions on hospitalization rates, separately for ambulatory care sensitive (ACS) conditions vs. others, and on intensity of care during hospital visits. Using the Nationwide Inpatient Sample (NIS) of 1996-2002, we find no evidence that the expansions lead to a decrease in hospitalizations. In our main specification, we find that overall hospitalization rates (defined as the number of hospitalizations divided by the population of children) increased by 3.2 percent in response to a 10 percentage point
increase in eligibility for public health insurance coverage. In terms of categories of hospitalization, only non-ACS hospitalizations increased in a statistically significant manner, not ACS hospitalizations. We also find that the coverage expansions increased intensity of care overall in terms of the number of procedures performed and length of stays, and that this effect also stems from an increase in care for children with non-ACS conditions.

Key words: Ambulatory sensitive conditions, Hospitalizations, Children's Health Insurance, CHIP

I. Introduction

Since the mid 1980s, the U.S. government has made large efforts to provide public insurance coverage for more low-income children. As a result of the implementation and expansions of Medicaid and SCHIP (henceforth “Medicaid” for both) from 1965 to the late 1990s, the fraction of the nation’s children that are eligible for free or drastically reduced-cost health care has gone

![Figure 1] Trend in Children's Eligibility

![Figure 2] Changes in Children's Eligibility Due to Policy

Note: This shows the average state, average child age level policy change, as captured by a simulated eligibility calculator that processes the sample through changing state rules. The y axis measures the percent of the constant sample of children who are eligible for coverage.