DEMAND FOR MEDICAL SERVICES AMONG PREVIOUSLY UNINSURED CHILDREN:
THE ROLES OF RACE AND RURALITY

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Executive Summary

Project Summary

This project examined the use of medical services over nearly two years among newly insured and continuously insured children, ages six through twelve, in the CHIP and Medicaid programs in South Carolina and West Virginia. We asked whether newly insured children had a different pattern of utilization than children who had been continuously insured. This information is needed to project the cost of extending coverage to uninsured children. However, the results of previous studies are conflicting, with some finding pent-up demand for care among newly insured children and others finding a gradual increase in demand. We hypothesized that the findings of previous studies were contradictory because of differences in the race and rurality of the children studied. Some studies were conducted in urban areas, others were rural. Some examined mainly white children, others mainly African-Americans. Our study improved on these studies because we were able to examine both white and African-American children in urban and rural areas in the same state - South Carolina - and rural and urban children in West Virginia. We also studied a longer time period than most other studies and were able to determine whether demand for medical services among newly insured children differed over the long-term from that of continuously insured children.

The study examined utilization of ambulatory care, prescription drug, emergency room, and inpatient hospital services, using number of services received and expenditures for services as the two measures of demand. The models controlled for age and sex of child as well as presence of chronic conditions including asthma, psychosocial problems, diabetes, congenital anomalies, and nervous system disorders. Continuously insured children had been insured for at least the year prior to the study period.

Major Findings

• There was no evidence of pent-up demand for medical care among newly insured children, when they were compared to children who had been continuously insured. In South Carolina, there was evidence of delayed demand, in which newly insured children had a lower demand for medical services at the outset and became increasingly similar in their demand to their continuously insured counterparts, over the long-term. In West Virginia, there was no difference between newly insured and continuously insured children’s demand for medical services, either at the outset or over the long-term.

• In neither state did newly insured children’s pattern of demand vary by whether a child lived in an urban or rural area or by the race of a child. Therefore, our original hypothesis that race and rurality would explain the discrepancies in initial demand for services between previous studies was not supported. In South Carolina, for instance, newly insured rural white children displayed delayed demand, just as did newly insured urban white children and rural and urban African-American children.

• Rurality and race affected all children’s medical care utilization, regardless of their prior health insurance status. The influence of rurality and race was persistent, but not consistent, within or across states. In West Virginia, rurality had the effect of increasing utilization among all children including number of ambulatory services received, number of prescriptions received in Year 2, and the probability of using the emergency room. In
South Carolina, rurality and race interacted, such that urban African-American children received the fewest services and had the lowest expenditures for ambulatory care and prescription drugs of all race/rurality groups. For ambulatory care, urban African-American children received the most ambulatory services and had the highest expenditures. For prescription drugs, urban white children had more prescriptions and higher prescription drug expenditures than any other children, although the difference between white and African-American children in prescription drug expenditures was greater in urban than in rural areas of South Carolina.

**Policy Recommendations**

- The results have funding implications for programs intended to extend health coverage to uninsured children. They suggest that funding projections for previously uninsured children, six to twelve years old:
  1. need not include a large initial expenditure for pent-up demand;
  2. should not be expected to be higher over the long-term than expenditures for continuously insured children; and
  3. may be expected to be lower than expenditures for continuously insured Medicaid recipients because previously uninsured children appear to be less likely to have chronic health conditions than children covered by Medicaid for a substantial length of time (this study; Byck 2000).

- Cost projection models should include race and rurality since these factors consistently influenced utilization. At present, the effects must be state- and service-specific, since their impact was not consistent across states and services.

- Because of the persistence of rural and racial effects on medical care demand and because these findings are not explained by possible differential reimbursement policies based on rurality, further investigation is warranted regarding the cause of the disparity in utilization by children in rural and urban areas and children of different races.