The Impact of Level of Disability, SES, and Access to Health Insurance on Health-related Outcomes for Children with Special Health Care Needs

I. Research Questions

A. What is the impact of the level of child disability on health-related outcomes?
B. How do social, economic, and demographic factors affect health-related outcomes for children with special health care needs?
C. How does access to health insurance, and the type of health insurance affect health-related outcomes for children with special health care needs?

II. Data

This study utilized the nationally representative National Survey on Children with Special Health Care Needs module of the State and Local Area Integrated Telephone Survey (SLAITS) developed by the NCHS and the CDC. SLAITS was intended to identify and measure a variety of health outcomes for children with special health care needs. 38,866 children with special health care needs were interviewed in the years 2000-2001 and will be included in this study.

III. Methods:

A. To measure level of disability, a three-item scale construction measuring multiple facets of disability was developed.
B. Cross-tabulations between independent variables and health-related outcomes were used for initial analyses.
C. A two-step multinomial logistic regression will be utilized to assess the impact of level of disability; social, economic, and demographic factors; and access to and type of health insurance on various health-related outcomes.

D. Measures:

1. Independent Variables

   a. Age
   b. Sex
   c. Metro State Area (MSA)
   d. Race
   e. Household Poverty Level
   f. Mother's Education Level
   g. Distribution of Household Resources
   h. Disability Level

2. Outcomes

   a. Number of school days missed due to illness or injury in the past 12 months
   b. Number of doctor visits in the past 12 months (not including hospital stays)
   c. Number of health care services needed in the past 12 months (excluding routine care)

d. Binary need for routine health care services needed in the past 12 months
e. Difference between health care services needed and services received in the past 12 months (excluding routine care)

IV. Preliminary Findings

A. The impact of level of child disability on health-related outcomes

1. Children with greater levels of disability tend to miss more days of school because of illness or injury than children with lower levels of disability. Nine percent of children who reported having a special health care need that was not severe vs. 38% of children who reported having a very severe special health care need missed 8 days of school or more in the 12 months prior to the survey.

2. Children with lower levels of disability tend to visit the doctor less frequently than children with greater levels of disability. Fifty-eight percent of children reporting a very severe special health care need visited the doctor 6 times or more in the past 12 months, compared to 23% of children reporting a non-severe special health care need.

3. Children with more significant levels of disability miss more needed health care services than children with less significant levels of disability. Thirty percent of children reporting a very severe special health care need were not able to get at least one needed health care service, in contrast to 6% of children who had the least severe special health care needs.

B. The impact of SES on health-related outcomes

1. CSHCN living in households with lower levels of income missed school more frequently than CSHCN living in households with higher levels of income. Thirty-three percent of CSCHN living in households below the poverty line missed 8 or more days of school, versus 19% of CSHCN living in households at 300% or more of the poverty line. In contrast, 36% of CSCHN in households below the poverty line reported missing 2 school days or fewer, and 46% of CSCHN living in households at 300% or more of the poverty line reported missing 2 school days or fewer.

2. White, non-Hispanic children with special health care needs tended to report having the most doctor visits in the past 12 months (44% reported having at least six), followed by White, Hispanic children (41% reported at least six visits), and by non-White children (39% had at least six).

C. The impact of access to and type of health insurance on health-related outcomes

1. Fifteen percent of CSHCN with no health insurance reported visiting the doctor at least 11 times in the past 12 months, compared with 27% of children with both public and private health insurances, 20% of children with only private health insurance, and 33% of children with only public health insurance.

2. CSHCN with no health insurance were also less likely than CSHCN with health insurance to

report needing any non-routine services. Forty-two percent of children without health insurance reported that they only needed two or fewer services in the past 12 months. In contrast, 23% of children with both private and public health insurance reported needing 2 or fewer services, 31% of children with only public health insurance, and 30% of children with only private health insurance.