## **Financing Health Care for Children with Chronic Conditions**

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This research aims to investigate how the health care costs for children with chronic conditions are financed. Previous literature either focuses on the financial costs of a subpopulation such as the autistic children (Sharpe and Baker, 2007), or chronically ill children among low-income families in California (Lukemeyer, Meyers, and Smeeding, 2000), or that of a non-categorical group as children with special health care needs (e.g. Shattuck and Parish 2008). The results from examining a subpopulation may not be generalizable, and the non-categorical approach ignores the disparities across chronic conditions. This study includes a number of chronic conditions and uses nationally representative data.

The 2004-2008 Medical Expenditure Panel Survey (MEPS-Household Component), and the 2003-2007 National Health Interview Survey (NHIS-Sample Child) are used. Specifically, along with the NHIS data on children's chronic condition, MEPS data between Panel 9 and 12 are used. A sample of 6,667 families is pooled together. Four variables —the total health care costs (HCC), the out-of-pocket HCC, the ratio of out-of-pocket HCC and total family income, and HCC paid by insurance — are used to measure financial burden. Reflecting the financial burden to the society, HCC paid by insurance is defined as the difference between total HCC and the out-of-pocket costs. The out-of-pocket HCC reflects the absolute financial burden to families, and the ratio of out-of-pocket HCC and total family income reflects the relative financial burden to families.

Over fifteen percent of the families reported zero cost on children's health care. Therefore, Tobit regression models are used to account for censored dependent variables. The key independent variables are 14 dichotomous variables with each representing a children's chronic condition, including retardation/Down syndrome, pervasive developmental disorder, ADHD/ADD, heart disease, epilepsy, asthma, migraine/headache, seeing difficulty, speech impairment, cerebral palsy, allergies, anemia, ear infection, and other conditions. Control variables include activity limitation, demographic variables of children such as age, gender, and race/ethnicity, family characteristics such as family size and income, and insurance coverage including private and public insurance.

Controlling for the influences of other socio-demographic characteristics on financial burden, the results show that chronic conditions including ADHD/ADD and asthma are associated with higher absolute and relative financial burden relative to that with healthy children, whereas conditions including pervasive developmental disorder and heart disease are associated with higher health care costs to the society relative to that with healthy children. In response to children's chronic conditions associated with large family financial burden, policy makers and financial educators may focus on these families and help them manage the financial burden. For example, families need to be educated about the benefits of private and public programs for which they are eligible. Also, further research is needed on the use of health care and insurance by children with chronic conditions to identify barriers to access.

## References

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## Acknowledgements

The author greatly appreciates the insightful comments and suggestions from Kathryn Stafford and Robert Scharff about this research. This research is supported by Graduate Dissertation Research Fellowship from the Edith M. Slabaugh Scholarship Fund at The Ohio State University.

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