

## Healthcare Utilization and Out-of-Pocket Expenditures: Does Family Structure Matter?

Vibha Bhargava, University of Georgia<sup>1</sup>  
Robert B. Nielsen, University of Georgia<sup>2</sup>

This study examined the association between family structure and healthcare utilization and out-of-pocket healthcare expenditures of families. A majority of individuals lead their life within a family and families influence healthcare decisions. As opposed to Grossman's (1972) view of individuals as the sole producer of health, Jacobson (2000) proposed that families produce health and healthcare investment decisions are made collectively within the family. This implies that each family member is a producer of not only his own health, but also the health of other family members. Investments in health are subject to time and resource constraints. The study was based on the premise that families in different types of family structure have unique intra-family resources and preferences that influence healthcare investment decisions.

The data used in this research were drawn from two surveys that are nationally-representative of the civilian non-institutionalized U.S. population: the 2008 Medical Expenditure Panel Survey (MEPS) and the Survey of Income and Program Participation (SIPP). The SIPP data were from the 2008 panel core waves 2-4 and the wave 4 topical module that contains healthcare utilization and expenditures. The final MEPS sample for this study was comprised of 7,245 families with two or more members. The final SIPP sample for this study was comprised of 22,078 families, each with two or more members as of the final month of the 12 month study period.

The dependent variables in the multivariate analysis were family out-of-pocket healthcare expenditures and family healthcare utilization. Family out-of-pocket expenditures were measured as out-of-pocket payments for healthcare services during the preceding 12 months. Four different measures of healthcare utilization were used: 1) total number of visits to the physician; 2) total number of visits to a dentist; 3) total number of inpatient nights; and 4) whether any prescription medication was used by a family member during the year. The key explanatory variables were the family structure variables: married couple without children under age; married couple with children under 18; single headed family with children under 18; and other family type. Negative binomial regression models were estimated to examine the relationship between family structure and health care utilization as measured by number of physician visits, number of inpatient nights, and number of dentist visits. A logistic regression model was used to assess the likelihood of any prescription drug use. A generalized linear model (GLM) with log link and gamma variance function was used to analyze out-of-pocket expenditures.

Preliminary findings suggested that there were differences in healthcare utilization by family structure, and these differences were largely consistent across the two data sources. Generally, findings suggest that families headed by a single adult with a child under age 18 in the home face the greatest utilization challenges and report the lowest out-of-pocket expenditures. In both MEPS and SIPP, out-of-pocket expenditures of single head with kid under 18 families were lower than other family structures. Compared with married couple with and without children under age 18 families, families headed by a single adult with a child under age 18 were less likely to use a prescription drug in the preceding 12 months. Controlling for health status, health insurance coverage, and income, these differences are indicative of other factors leading to lower level of healthcare utilization in these families. In the context of the Grossman/Jacobson theoretical framework, we surmise that the health and healthcare investment decisions being made in these families are subject to time and resource constraints that are not faced by the other family structure types. Healthcare policies should focus on removing access barriers for individuals residing in such families.

### References

- Grossman, M. (1972). The concept of health capital and the demand for health. *Journal of Political Economy*, 80, 223-255.
- Jacobson, L. (2000). The family as producer of health - an extended Grossman model. *Journal of Health Economics*, 19, 611-637.

<sup>1</sup> Assistant Professor, Department of Housing and Consumer Economics, 202 Consumer Research Center, 415 Sanford Dr, University of Georgia, Athens, GA. Phone: 706-542-4851. Email: [vibha@uga.edu](mailto:vibha@uga.edu)

<sup>2</sup> Associate Professor, Department of Housing and Consumer Economics, 205 Consumer Research Center, 415 Sanford Dr, University of Georgia, Athens, GA. Phone: 706-542-8885. Email: [rnielsen@uga.edu](mailto:rnielsen@uga.edu)