Multilevel analysis of financial burden in families of children with special health care needs

Paul T. Shattuck, Susan L. Parish

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**Abstract:** The main objective of this study was to examine variability among states for 3 indicators of the family financial burden related to caring for children with special health care needs. Data were from a 2001 national survey of households with children (<18 years of age) with special health care needs, with a representative sample from each state. The outcomes examined included whether a family had any out-of-pocket expenditures during the previous 12 months related to the child's special health care needs, the amount of expenditure (absolute burden), and the amount of expenditure per $1000 of family income (relative burden). We used multilevel regression to examine state-level variability in financial burden, controlling for individual-level factors. We also examined the association between state median family income and state mean financial burden. Overall, 82.5% of families reported expenditures of more than $0. Among these families, the mean unadjusted absolute burden was $752 and the relative burden was $19.6 per $1000. Adjusted state means ranged from $562 to $972 for absolute burden and from $14.5 to $32.3 per $1000 for relative burden. Families living in states with higher median family incomes had lower financial burdens across all 3 measures. Families that are similar with respect to household demographic characteristics and the nature of their children's special health care needs have different out-of-pocket health expenditures depending on the state in which they live. Documenting and understanding this variability moves the field closer to the goal of establishing evidence-based, state policy recommendations aimed at reducing the financial burden of these vulnerable families.