PEDIATRICS®
OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

Financial Burden in Families of Children With Special Health Care Needs: Variability Among States

Paul T. Shattuck and Susan L. Parish

Pediatrics 2008;122;13-18
DOI: 10.1542/peds.2006-3308

ARTICLE

Financial Burden in Families of Children With Special Health Care Needs: Variability Among States

Paul T. Shattuck, PhD, MSSW[a], Susan L. Parish, PhD, MSW[b]

[a]George Warren Brown School of Social Work, Washington University, St Louis, Missouri; [b]School of Social Work, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

The authors have indicated they have no financial relationships relevant to this article to disclose.

What's Known on This Subject

States vary with respect to the proportion of families reporting financial problems related to caring for CSHCN. State variability in actual out-of-pocket expenditures, controlling for individual factors, has not been examined.

What This Study Adds

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.

ABSTRACT

OBJECTIVE. 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.

METHODS. 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.

RESULTS. 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.

CONCLUSIONS. 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. *Pediatrics* 2008;122:13–18

www.pediatrics.org/cgi/doi/10.1542/peds.2006-3308

doi:10.1542/peds.2006-3308

Key Words
socioeconomic factors, health expenditures, cost of illness

Abbreviation
CSHCN—children with special health care needs

Accepted for publication Nov 1, 2007

Address correspondence to Paul T. Shattuck, PhD, MSSW, George Warren Brown School of Social Work, Washington University, Campus Box 1196, St Louis, MO 63130-4899. E-mail: pshattuck@wustl.edu

THE COSTS OF caring for children with special health care needs (CSHCN) are high, relative to those for typically developing children, because of elevated requirements for both primary and specialty medical care, as well as therapeutic and supportive services such as rehabilitation, environmental adaptations, assistive devices, personal assistance, and mental health, home health, and respite care.[1–3] The financial burden associated with raising CSHCN has important clinical and social implications. Understanding the financial burden in this population is especially pressing, given recent estimates of the prevalence of special health care needs among US children ranging from 12.8% to 15.6%.[2,4]

Research on the family financial burden associated with caring for CSHCN is limited. Although some studies have examined the expenditures associated with caring for children with specific impairments[5,6] or residing in specific states,[7] few studies have examined the family financial burden for a nationally representative sample of CSHCN. Kuhlthau et al[8] found that ~40% of US families caring for CSHCN reported financial concerns (eg, they needed additional income for the child's care, they stopped or reduced employment to care for the child, or the child's care caused financial problems). Mean levels of self-reported financial concerns related to caring for CSHCN varied widely among states, and families living in states with lower child poverty rates were less likely to report financial problems. In another national study, Newacheck and Kim[2] found that mean direct out-of-pocket expenditures for families with

CSHCN were more than twice the mean for families with nondisabled children. However, state variability in the financial burden was not examined.

To our knowledge, no study has examined how financial burdens vary according to state, controlling for child and family characteristics. This lack of research exists despite the fact that conceptual models of health care access and related outcomes explicitly emphasize studying the impact of contextual political, social, and economic factors.[9–13] Given that population health, health policies, and health care market structures vary widely among states, it is important to understand state variability in family financial burdens.

Taking initial steps toward understanding state variability in family financial burdens is important for several reasons. Such research can directly inform public health policymaking aimed at reducing family financial burdens even if all of the mediating pathways are not fully understood. Professional and patient groups can use these findings to support advocacy efforts aimed at systems-level policy changes. Information about state variability in financial burdens also can help clinicians better understand the challenges facing their patients and become more-effective advocates for families. Finally, this work can stimulate additional research aimed at understanding the linkages between state policy variability and financial burden variability.

The specific aim of this study was to examine state variability in the financial burdens of families of CSHCN by using a national health survey. Our first hypothesis was that the average family financial burden would vary significantly among states, even controlling for child and family factors. Our second hypothesis was that families residing in wealthier states would tend to have smaller financial burdens. In addition to the previous finding of smaller reported burdens associated with lower child poverty rates,[8] wealthier states enjoy a stronger base of financial resources with which to invest in child welfare and tend to have enhanced capacity for policy innovation and implementation.[14,15]

METHODS

Sample and Sources of Data

The 2001 National Survey of CSHCN was a random-digit-dialed telephone survey representative of the US civilian noninstitutionalized population <18 years of age, conducted by the National Center for Health Statistics from October 2000 to April 2002. A complete description of the survey methods and sample is available elsewhere.[4,16] Briefly, 196/888 screening interviews with households including children were completed using the CSHCN Screener.[17] The total response rate across all stages of the sampling process was 61.6%.[4] The final sample included 38 866 special needs interviews.[16] The sampling strategy was designed to obtain 750 completed telephone interviews with families of CSHCN in every state and Washington, DC, thereby enabling population estimates that are representative at the state level. The parent or guardian who was most knowledgeable about the child's health care served as the respondent.

The CSHCN screener uses 5 unfolding questions to ascertain whether the child has health problems that have lasted or are expected to last ≥12 months and to result in ≥1 of the following situations: (1) the child needs more medical care, mental health care, or educational assistance than peers; (2) the child currently needs prescription medication; (3) the child is limited in his or her ability to do things; (4) the child needs physical, occupational, or speech therapy; or (5) the child has an emotional, developmental, or behavioral problem. There were no questions about specific diagnoses or functional abilities. State-level data on the median income level for families with children <18 years of age were publicly available from the 2000 US Census.[18]

Measures

Absolute financial burden was based on respondents' reported out-of-pocket expenditures related to their child's special health care needs during the previous 12 months as 1 of 6 response categories, that is, $0, $1 to $249, $250 to $500, $501 to $1000, $1001 to $5000, or more than $5000. Included were costs related to treatment, medications, special foods, adaptive clothing, durable equipment, home modifications, and any kind of therapy. Respondents were asked to exclude insurance premiums and any costs reimbursed by insurance. Our absolute burden variable was created by using category midpoints. For those with expenditures above $5000, we substituted the median out-of-pocket health expenditure for children <18 years of age who had more than $5000 in expenditures from the 2000 Medical Expenditure Panel Survey ($5997).[19] Relative financial burden was calculated as out-of-pocket expenditures per $1000 of gross household income.

For the variable measuring household income relative to the federal poverty level, data were missing for 3637 families (9.4%). We used multiply imputed poverty level data available from the National Center for Health Statistics.[20] Imputed data are not publicly available for other variables. Therefore, 4187 cases (10.8%) were dropped from analyses because of missing values for ≥1 other variable. The analyses reported here are based on a total of 34 679 cases with valid values for all variables used. Compared with cases with complete data, incomplete cases did not differ significantly with respect to absolute or relative financial burden, parent ranking of severity, or gender. However, children with incomplete data were significantly more likely to be younger, nonwhite, poor, living with a single mother, uninsured, and covered by public insurance and to have a mother with lower education.

Household income data were obtained in the National Survey of CSHCN interview but are not publicly available. We obtained the survey's median income estimates for each stratum defined by the intersection of state, household size, and federal poverty level through direct correspondence with the National Center for Health Statistics (Stephen J. Blumberg, PhD, personal communication, 2007). We created an income variable by substituting the median income estimate for each family

according to their state of residence, household size, and poverty level.

We controlled for child-level covariates, including age, gender, ethnicity, race, parent's ranking of the severity of the child's condition, amount of time the child was affected by the condition during the past 12 months, which CSHCN screener triggers were flagged, and whether taking prescription medication was the only CSHCN screener trigger the parent endorsed. We also controlled for health insurance and service covariates, including whether the child had health insurance for all of the previous 12 months, type of insurance (private, public, both, or none), participation in services funded by the Individuals with Disabilities Education Act, and whether the child had a usual source of health care. Family and household covariates included household income relative to the federal poverty level, whether the household was headed by a single mother, and maternal education. Parental employment status and detailed questions about parent or child health status or specific diagnoses were not ascertained in this survey.

Data Analyses

Multilevel regression is one method for modeling nested correlated data.[21,22] The present data are individual observations nested within states, thereby violating the requirement in ordinary linear regression for independence of observations. Multilevel regression corrects for this nonindependence and allows for the simultaneous estimation of the contribution of variables from the individual level and the state level.

State median income and all individual-level variables were centered on their grand means. Therefore, the intercept of each model represents the expected value of financial burden when all other variables are at their mean values. We hypothesized that states would vary in terms of mean family financial burden measures, so this intercept estimate was freed to vary among states. In turn, the models estimated the association between this variability among states and state-level family median income.

A 2-part,[23] multilevel, regression,[21,22] modeling approach was used to model financial burden. Two-part models are used to model health costs when a substantial proportion of respondents report no expenditures.[23–26] Fully 17.5% of our sample reported having no out-of-pocket expenditures. A 2-part model begins by using logistic regression to estimate the likelihood of having any expenditures. A second regression then is used to model financial burden by using only cases with expenditures of more than $0. Absolute and relative financial burdens were modeled in separate part 2 regressions. Consistent with more-recent methodologic recommendations and our goal of maximizing the substantive interpretability of regression coefficients, we used linear models of the untransformed financial burden variables in the part 2 regressions.[24–26] Estimates of mean financial burden across all families, including those with expenditures of $0, could be obtained by multiplying the probability estimate derived from the logistic regression by the cost estimate derived from the part 2 regression.[23,24]

The 2-part modeling approach was implemented by using multilevel regression in HLM 6.0 (Scientific Software International, Chicago, IL) with full maximal likelihood, weighting, and adjustment of SEs in accordance with standard procedures for analyzing multiply imputed data. All unadjusted estimates were produced by using SUDAAN (Research Triangle Institute, Research Triangle Park, NC).

RESULTS

Overall, 82.5% of families had financial burdens of more than $0. The unadjusted mean absolute burden among families with any expenditures was $752, and the relative burden was $19.6 per $1000 of gross household income. The unadjusted, estimated, mean financial burden across all families, including those with burdens of $0, was $620 (0.825 × $752). Multilevel hypothesis tests revealed statistically significant variability among states for all 3 unadjusted measures. With adjustment for individual factors and state median income, 91.2% of families had financial burdens of more than $0, the overall mean absolute burden for those with any expenditures was $776, and the mean relative burden was $20.8. The adjusted, estimated, mean financial burden across all families was $708. Given that all individual- and state-level covariates were centered on their means, this latter estimate should be interpreted as the adjusted, annual, out-of-pocket expenditures for a hypothetical average child with special health care needs.

Comparisons of unadjusted state mean burden estimates can be misleading to the extent that differences may reflect differences in the composition of each state's sample. Sorting states according to adjusted mean burden allows for comparisons beyond these differences. Table 1 groups states into quintiles based on each measure of adjusted financial burden. Adjusted state mean absolute burdens, for those with burdens of more than $0, ranged from $562 (Massachusetts) to $972 (Georgia). Adjusted relative burdens ranged from $14.5 (California) to $32.3 (Louisiana). Seventeen states remained in the same quintile for absolute burden before and after adjustment for individual- and state-level control factors, 27 states shifted 1 quintile, 6 states shifted 2 quintiles, and 1 state shifted 3 quintiles. Twenty-seven states remained in the same quintile for relative burden before and after adjustment, 18 states shifted 1 quintile, and 6 states shifted 2 quintiles.

State median household income was inversely associated with the adjusted state estimates for the likelihood of having any expenditures, absolute burden, and relative burden (Fig 1). Wealthier states tended to have a smaller proportion of families with any financial burden and lower mean burden among those with burdens of more than $0. State median family incomes ranged from approximately $36 000 to $66 000 in 2000. Multilevel regression adjusting for individual-level covariates revealed that the expected value of the absolute burden decreased $6.3 and the relative burden decreased $0.3 for every $1000 increase in state median income.

TABLE 1 **States Grouped Into Quintiles on the Basis of Adjusted Estimates of Financial Burden**

	Adjusted Proportion of Families With Any Financial Burden, %	State Adjusted Mean Absolute Burden for Families With Burdens of More Than $0, $	State Adjusted Mean Relative Burden for Families With Burdens of More Than $0, $[a]
Overall mean	91.2	776	20.8
Quintile 1	Range: 86.1–89.1[b]	Range: 562–712[b]	Range: 14.5–18.2[b]
	Michigan	Massachusetts	California
	Minnesota	Michigan	Texas
	Pennsylvania	Rhode Island	Massachusetts
	Washington	New York	Arizona
	Massachusetts	New Hampshire	New York
	California	Connecticut	Connecticut
	New York	Arizona	Michigan
	Connecticut	Virginia	Rhode Island
	Wisconsin	California	Hawaii
	Hawaii	Oregon	Alaska
Quintile 2	Range: 89.3–90.6[b]	Range: 718–755[b]	Range: 18.2–19.7[b]
	Alaska	Hawaii	Ohio
	New Jersey	Washington	Pennsylvania
	Maryland	Delaware	New Hampshire
	Virginia	Pennsylvania	Wisconsin
	Delaware	Minnesota	Utah
	New Hampshire	Wisconsin	New Jersey
	Rhode Island	New Jersey	Maryland
	Iowa	Texas	Delaware
	Nebraska	Iowa	Washington
	Vermont	New Mexico	Minnesota
Quintile 3	Range: 91.1–91.9[b]	Range: 756–785[b]	Range: 20.1–20.8[b]
	Colorado	Ohio	Maine
	District of Columbia	Maine	Nevada
	Nevada	Kentucky	Nebraska
	Indiana	Alaska	Kansas
	Oregon	Illinois	Missouri
	Maine	Maryland	New Mexico
	Missouri	Utah	Vermont
	South Dakota	Missouri	Oregon
	West Virginia	Kansas	Iowa
	Wyoming	Vermont	Colorado
	Arizona	Nebraska	Kentucky
Quintile 4	Range: 91.9–92.6[b]	Range: 803–847[b]	Range: 21.6–23.4[b]
	North Dakota	Nevada	Illinois
	Utah	Alabama	North Carolina
	North Carolina	South Dakota	Wyoming
	Georgia	Wyoming	Arkansas
	Oklahoma	Indiana	Idaho
	Idaho	West Virginia	Montana
	Ohio	Arkansas	South Dakota
	Kansas	Idaho	Indiana
	Tennessee	District of Columbia	North Dakota
	Louisiana	Oklahoma	Mississippi
Quintile 5	Range: 92.6–94.2[b]	Range: 849–972[b]	Range: 23.5–32.3[b]
	Montana	Montana	Tennessee
	New Mexico	Louisiana	Alabama
	South Carolina	Mississippi	Virginia
	Alabama	North Dakota	District of Columbia
	Florida	Florida	West Virginia
	Illinois	North Carolina	Oklahoma
	Kentucky	Colorado	Georgia
	Arkansas	Tennessee	Florida
	Texas	South Carolina	South Carolina
	Mississippi	Georgia	Louisiana

[a] Relative burden is the burden per $1000 of household income.

[b] Ranges represent the minimum and maximum values in each quintile, not the midpoint value between adjacent quintiles.

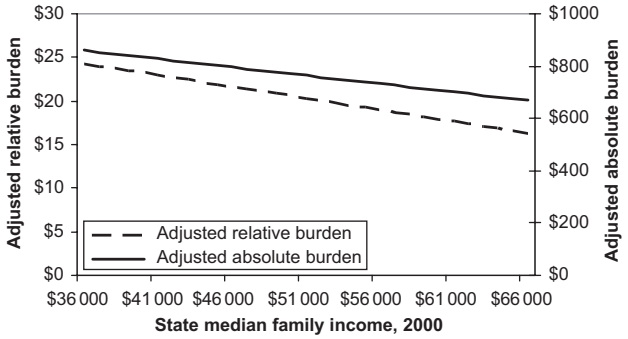

FIGURE 1
Model-based relationship between state median family income in 2000 and adjusted financial burden measures.

DISCUSSION

Both of our main hypotheses were supported. There is significant variability among states in family financial burdens after adjustment for individual and family characteristics. Families living in wealthier states have lower adjusted financial burdens. This clearly demonstrates that the state in which a family lives can have a substantial effect on the financial burden related to caring for a child with special needs. There are many plausible reasons for this wide variability, including differences in the structure and regulation of state health care markets, state variability in health status factors not measured in this survey, and state-level policies related to child health and family support. Future research should examine these possibilities.

The main policy significance of our study is the illustration of how family financial burdens are significantly influenced by state residence. Families that are similar with respect to household demographic characteristics and the nature of their children's special health care needs may have very different out-of-pocket health expenditures depending on their state of residence. Policies enabling poorer states to provide more-generous financial support to families with CSHCN are indicated, because adjusted financial burden tended to be higher in such states.

The primary methodologic significance of our study is the demonstration that analyses of financial burden must account for contextual variability. Estimates of aggregated mean financial burdens at the state level would be incomplete if they did not adjust for individual factors, and estimates of individual financial burdens from national data would be incomplete if they did not consider state-level variability.

Our work confirms the previous unadjusted finding that families in wealthier states tend to report having fewer financial problems.[8] However, our unadjusted financial burden estimate across all children was $620, almost twice the figure ($352) reported by Newacheck and Kim[2] with data from the Medical Expenditure Panel Survey. Although the 2 surveys used the same CSHCN screening tool, the Medical Expenditure Panel Survey estimate of CSHCN prevalence (15.6%) was higher than that in the present survey (12.9%), which suggests that there might have been other significant differences in the composition of the samples related to financial burden. Furthermore, the Medical Expenditure Panel Survey used a lengthy, highly detailed series of questions to determine household income and health expenditures, whereas the CSHCN survey used global omnibus questions to determine income and expenditures.

This study had several limitations. First, income and expenditure measures were based on omnibus questions that might not have fully captured the nuances of families' finances. Second, parental employment status, which has been shown to be related to both insurance status[27] and financial burden,[28] was not assessed in this survey. Third, the nature of the CSHCN screener resulted in a sample in which 36% of the children were included solely because they were taking prescription medications. Therefore, families with children with more-severe health conditions might be underrepresented and might have qualitatively different experiences with financial burden that were not captured in these analyses. Finally, these findings are cross-sectional and do not permit firm conclusions about causal relationships among variables.

Several significant strengths counterbalance these limitations. First, the unique sampling design of this survey resulted in a representative sample from each state. Second, the use of a 2-part modeling strategy is advantageous, compared with methods that do not distinguish families with no burdens from those with burdens of more than $0. Finally, the use of multilevel regression allowed us to examine both individual-level and state-level correlates of financial burden. We are unaware of previous research that has accomplished this.

CONCLUSIONS

This research used an innovative approach to increase our understanding of the extent of state variability in the family financial impact of CSHCN. This variability persists after controlling for child and family characteristics. These findings can inform future policy debates about how these vulnerable families can best be supported, and they offer important insights into the financial struggles facing families of CSHCN.

ACKNOWLEDGMENT

Support for the preparation of this article was provided by the National Institute of Child Health and Human Development (grant T32 HD07489).

REFERENCES

1. Newacheck PW, Inkelas M, Kim SE. Health services use and health care expenditures for children with disabilities. *Pediatrics.* 2004;114(1):79–85
2. Newacheck PW, Kim SE. A national profile of health care utilization and expenditures for children with special health care needs. *Arch Pediatr Adolesc Med.* 2005;159(1):10–17
3. US General Accounting Office. *Medicaid Managed Care: Challenges in Implementing Safeguards for Children With Special Needs.* Washington, DC: US General Accounting Office; 2000. Publication GAO/HEHS-00-37

4. van Dyck P, Kogan MD, McPherson M, Weissman G, Newacheck PW. Prevalence and characteristics of children with special health care needs. *Arch Pediatr Adolesc Med.* 2004;158(9): 884–890
5. Chan E, Zhan C, Homer J. Health care use and costs for children with attention deficit/hyperactivity disorder. *Arch Pediatr Adolesc Med.* 2002;156(5):504–511
6. Lozano P, Fisherman P, VonKorff M, Heet J. Health care utilization and cost among children with asthma who were enrolled in a health maintenance organization. *Pediatrics.* 1997; 99(6):757–764
7. Lukemeyer A, Meyers MK, Smeeding T. Expensive children in poor families: out-of-pocket expenditures for the care of disabled and chronically ill children in welfare families. *J Marriage Family.* 2000;62(2):399–415
8. Kuhlthau K, Hill KS, Yucel R, Perrin JM. Financial burden for families of children with special health care needs. *Matern Child Health J.* 2005;9(2):207–218
9. Litaker D, Koroukian SM, Love TE. Context and healthcare access: looking beyond the individual. *Med Care.* 2005;43(6): 531–540
10. Phillips KA, Morrison KR, Andersen R, Aday LA. Understanding the context of healthcare utilization: assessing environmental and provider-related variables in the behavioral model of utilization. *Health Serv Res.* 1998;33(3):571–596
11. Andersen RM, Davidson PL. Improving access to care in America: individual and contextual indicators. In: Andersen RM, Rice TH, Kominski GF, eds. *Changing the U.S.* CA: Wiley; 2007:3–32Health Care System. San Francisco
12. Jeffrey AE, Newacheck PW. Role of insurance for children with special health care needs: a synthesis of the evidence. *Pediatrics.* 2006;118(4). Available at: www.pediatrics.org/cgi/content/full/118/4/e1027
13. Institute of Medicine, Committee on the Consequences of Uninsurance. *Coverage Matters: Insurance and Health Care*. Washington, DC: National Academies Press; 2001
14. Goggin ML, Bowman A, Lester J, O'Toole L. *Implementation Theory and Practice: Toward a Third Generation*. Glenview, IL: Scott Foresman/Little, Brown; 1990
15. Subramanian SV, Kawachi I, Kennedy BP. Does the state you live in make a difference? Multilevel analysis of self-rated health in the US. *Soc Sci Med.* 2001;53(1):9–19
16. Blumberg SJ, Olson L, Frankel M, et al. Design and operation of the National Survey of Children with Special Health Care Needs, 2001. *Vital Health Stat 1.* 2003;(41):1–136
17. Bethell CD, Read D, Stein RK, Blumberg SJ, Wells N, Newacheck PW. Identifying children with special health care needs: development and evaluation of a short screening instrument. *Ambul Pediatr.* 2002;2(1):38–48
18. US Census Bureau. Census 2000, Summary File 3; Table P77 Median family income in 1999; generated by Paul Shattuck using American FactFinder. Available at: www.census.gov/main/www/cen2000.html. Accessed October 20, 2005
19. Agency for Healthcare Research and Quality. Medical Expenditure Panel Survey, person-level file. Available at: www.meps.ahrq.gov/mepsweb/data_stats/meps_query.jsp. Accessed April 2, 2006
20. Pedlow S, Luke JV, Blumberg SJ. *Multiple Imputation of Missing Household Poverty Level Values From the National Survey of Children with Special Health Care Needs, 2001, and the National Survey of Children's Health, 2003*. Hyattsville, MD: National Center for Health Statistics; 2007 Available at: www.cdc.gov/nchs/data/slaits/mimp01_03.pdf. Accessed May 5, 2008
21. Raudenbush S, Bryk A. *Hierarchical Linear Models: Applications and Data Analysis Methods*. 2nd ed. London, United Kingdom: Sage; 2002
22. Snijders T, Bosker R. *Multilevel Analysis: An Introduction to Basic and Advanced Multilevel Modeling*. Thousand Oaks, CA: Sage; 1999
23. Duan N, Manning W, Morris C, Newhouse J. A comparison of alternative models for the demand for health care. *J Bus Econ Stat.* 1983;1(2):115–126
24. Mullahy J. Much ado about two: reconsidering retransformation and the two-part model in health econometrics. *J Health Econ.* 1998;17(3):247–281
25. Buntin MB, Zaslavsky AM. Too much ado about two-part models and transformation? Comparing methods of modeling Medicare expenditures. *J Health Econ.* 2004;23(3):525–542
26. Diehr P, Yanez D, Ash A, Hornbrook M, Lin DY. Methods for analyzing health care utilization and costs. *Annu Rev Public Health.* 1999;20:125–144
27. DeNavas-Walt C, Proctor BD, Lee CH. *Income, Poverty, and Health Insurance Coverage in the United States, 2005*. Washington, DC: US Census Bureau; 2006
28. Parish SL, Seltzer MM, Greenberg JS, Floyd FJ. Economic implications of caregiving at midlife: comparing parents of children with developmental disabilities to other parents. *Ment Retard.* 2004;42(6):413–426

Financial Burden in Families of Children With Special Health Care Needs: Variability Among States

Paul T. Shattuck and Susan L. Parish

Pediatrics 2008;122;13-18
DOI: 10.1542/peds.2006-3308