

## STATISTICAL BRIEF #343

October 2011

### **Health Care Expenses and Utilization for Children with Special Health Care Needs, 2008: Estimates for the U.S. Civilian Noninstitutionalized Population**

*Karen E. Davis, MA*

#### **Introduction**

Children with special health care needs (SHCN) have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and also require health and related services of a type or amount beyond that required by children generally (McPherson et al., 1998). A screener questionnaire covering five health domains (Bethell et al., 2002) is commonly used in national surveys to identify children with special health care needs.

This Statistical Brief compares health care utilization and expenditures for children under 18 years of age reported as having SHCN to those without SHCN. The estimates for the U.S. civilian noninstitutionalized population are derived from the 2008 Household Component of the Medical Expenditure Panel Survey (MEPS-HC). All differences between estimates noted in the text are statistically significant at the 0.05 level or better.

#### **Findings**

In 2008, 13.3 million or 17.9 percent of children under 18 years of age in the U.S. noninstitutionalized civilian population were reported as having SHCN (figure 1). The percentage of children identified with SHCN was higher for children ages 12–17 (22.4 percent) than for children under 6 years of age (9.7 percent) and for boys (21.5 percent) than girls (14.1 percent). Hispanic children were less likely to report having SHCN than non-Hispanic white, non-Hispanic black, and non-Hispanic other children (11.0 percent versus 20.6 percent, 18.7 percent, and 16.4 percent, respectively).

In 2008, a total of \$54.5 billion was spent on health care for children under 18 identified with special health care needs (data not shown in figures). While children with SHCN represent 17.9 percent of all children, they accounted for 47.6 percent of all children's total health care expenditures in 2008 (figure 2). Children reported as having SHCN accounted for 41.2 percent of ambulatory (office-based and hospital outpatient visits combined) care expenditures, and 84.6 percent of prescription medication expenses in 2008.

In 2008, 96.2 percent of children identified with special needs had health care expenditures, compared to 82.1 percent of children without SHCN (figure 3). About two-thirds of children without SHCN had ambulatory care, compared to 86.8 percent of children identified with special health care needs. In 2008, 81.8 percent of children who reported SHCN received prescription medications, compared to 38.9 percent of children without SHCN.

Among those with any health care expenses in 2008, the mean expenditure per child who reported having special health care needs (\$4,100) was more than four times the mean for children without SHCN (\$983) (figure 4). Among children with specific health care services, the mean expenditure per SHCN child for prescription medications was nearly 12 times the mean for children without SHCN (\$1,155 versus \$98) while the mean expenditure per SHCN child for ambulatory visits (\$1,284) was 2.5 times the mean for children without SHCN (\$512).

#### **Highlights**

- While children identified as having special health care needs represent 17.9 percent of all children in the U.S., they accounted for 47.6 percent of all children's total health care expenditures in 2008.
- Among those with any health care expenses in 2008, the mean expenditure per child who reported having special health care needs (\$4,100) was more than four times the mean for children without special needs (\$983).
- Among those with purchases, the mean number of prescription drug purchases by children reported with special health care needs was 9.9, while children without special health care needs had an average of 2.6 purchases in 2008.

Among those with any visits, the mean number of ambulatory visits in 2008 was 7.3 for children reported with special health care needs; more than twice as many visits on average as children without SHCN (3.2) (figure 5). Among those with any purchases, the mean number of prescription medication purchases by children identified with SHCN was 9.9, while children without special health care needs had an average of 2.6 purchases.

## Data Source

The estimates shown in this Statistical Brief are based on data from the MEPS 2008 Full Year Consolidated File (HC-121).

## Definitions

### *Children with special health care needs*

The children with special health care needs screener questionnaire in the Child Preventive Health Supplement section of the MEPS-HC consists of a series of question-sequences for each of five health domains (Bethel, Reid, Stein, et al., 2002): 1) the need or use of medicines prescribed by a doctor; 2) the need or use of more medical care, mental health, or education services than is usual for most children; 3) being limited or prevented in doing things most children can do; 4) the need or use of special therapy such as physical, occupational, or speech therapy; and 5) the need or use of treatment or counseling for emotional, developmental, or behavioral problems. Children with positive responses to all questions within at least one of the five health domains, and who had a condition that has lasted or was expected to last for at least 12 months, were identified as having special health care needs.

### *Expenditures*

Expenditures in MEPS are defined as payments from all sources for hospital inpatient care, ambulatory care provided in offices and hospital outpatient departments, care provided in emergency departments, paid care provided in the patient's home (home health), and the purchase of prescribed medications. Sources include direct payments from individuals, private insurance, Medicare, Medicaid, Workers' Compensation, and miscellaneous other sources. Payments for over-the-counter drugs are not included in MEPS total expenditures. Indirect payments not related to specific medical events, such as Medicaid Disproportionate Share and Medicare Direct Medical Education subsidies, are also excluded.

## About MEPS-HC

MEPS-HC is a nationally representative longitudinal survey that collects detailed information on health care utilization and expenditures, health insurance, and health status, as well as a wide variety of social, demographic, and economic characteristics for the U.S. civilian noninstitutionalized population. It is cosponsored by the Agency for Healthcare Research and Quality and the National Center for Health Statistics.

For more information about MEPS, call the MEPS information coordinator at AHRQ (301-427-1406) or visit the MEPS Web site at <http://www.meps.ahrq.gov/>.

## References

Bethel, C. D., Reid, D., Stein, R. E. K., Blumberg, S. J., Wells, N., Newacheck, P. W. Identifying Children with Special Health Care Needs: Development and Evaluation of a Short Screening Instrument. *Ambulatory Pediatrics*, Vol. 2, No. 1, January-February 2002.

McPherson, M., Arango, P., Fox, H., et al. *A New Definition of Children with Special Health Care Needs*. *Pediatrics*, 1998; 102: 137-140.

For a detailed description of the MEPS survey design, sample design, and methods used to minimize sources of nonsampling errors, see the following publications:

Cohen, J. *Design and Methods of the Medical Expenditure Panel Survey Household Component*. MEPS Methodology Report No. 1. AHCPR Pub. No. 97-0026. Rockville, MD. Agency for Health Care Policy and Research, 1997. [http://www.meps.ahrq.gov/mepsweb/data\\_files/publications/mr1/mr1.pdf](http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr1/mr1.pdf).

Cohen, S. *Sample Design of the 1996 Medical Expenditure Panel Survey Household Component*. MEPS Methodology Report No. 2. AHCPR Pub. No. 97-0027. Rockville, MD. Agency for Health Care Policy and Research, 1997. [http://www.meps.ahrq.gov/mepsweb/data\\_files/publications/mr2/mr2.pdf](http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr2/mr2.pdf)

Cohen, S. Design Strategies and Innovations in the Medical Expenditure Panel Survey. *Medical Care*, July 2003: 41(7) Supplement: III-5—III-12.

Ezzati-Rice, T. M., Rohde, F., Greenblatt, J. *Sample Design of the Medical Expenditure Panel Survey Household Component, 1998–2007*. Methodology Report No. 22. March 2008. Agency for Healthcare Research and Quality, Rockville, MD. [http://www.meps.ahrq.gov/mepsweb/data\\_files/publications/mr22/mr22.pdf](http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr22/mr22.pdf).

For more information about children with special health care needs, see the following:

Chevarley, F. M. *Access to Needed Medical Care among Children under 18 Years of Age with Special Health Care Needs, 2002*. Statistical Brief #75. April 2005. Agency for Healthcare Research and Quality, Rockville, MD. [http://meps.ahrq.gov/mepsweb/data\\_files/publications/st75/stat75.pdf](http://meps.ahrq.gov/mepsweb/data_files/publications/st75/stat75.pdf)

Chevarley, F. M. *Utilization and Expenditures for Children with Special Health Care Needs*. Research Findings #24. January 2006. Agency for Healthcare Research and Quality, Rockville, MD. [http://www.meps.ahrq.gov/data\\_files/publications/rf24/rf24.pdf](http://www.meps.ahrq.gov/data_files/publications/rf24/rf24.pdf)

The Child and Adolescent Health Measurement Initiative: <http://www.cahmi.org/pages/Sections.aspx?section=10>

## Suggested Citation

Davis, K. *Health Care Expenses and Utilization for Children with Special Health Care Needs, 2008: Estimates for the U.S. Civilian Noninstitutionalized Population*. Statistical Brief #343. October 2011. Agency for Healthcare Research and Quality, Rockville, MD [http://www.meps.ahrq.gov/mepsweb/data\\_files/publications/st343/stat343.pdf](http://www.meps.ahrq.gov/mepsweb/data_files/publications/st343/stat343.pdf)

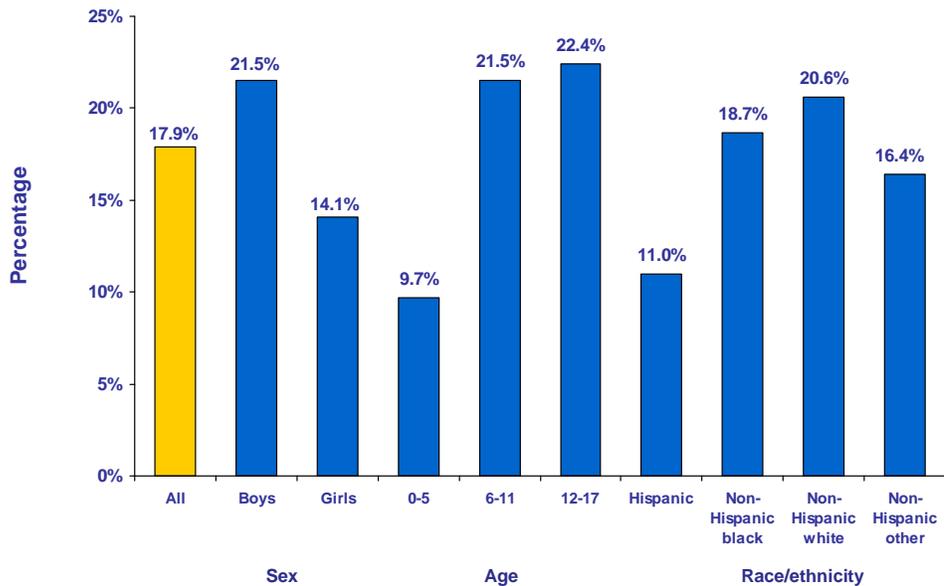
\* \* \*

AHRQ welcomes questions and comments from readers of this publication who are interested in obtaining more information about access, cost, use, financing, and quality of health care in the United States. We also invite you to tell us how you are using this Statistical Brief and other MEPS data and tools and to share suggestions on how MEPS products might be enhanced to further meet your needs. Please e-mail us at [MEPSProjectDirector@ahrq.hhs.gov](mailto:MEPSProjectDirector@ahrq.hhs.gov) or send a letter to the address below:

Steve B. Cohen, PhD, Director  
Center for Financing, Access, and Cost Trends  
Agency for Healthcare Research and Quality  
540 Gaither Road  
Rockville, MD 20850



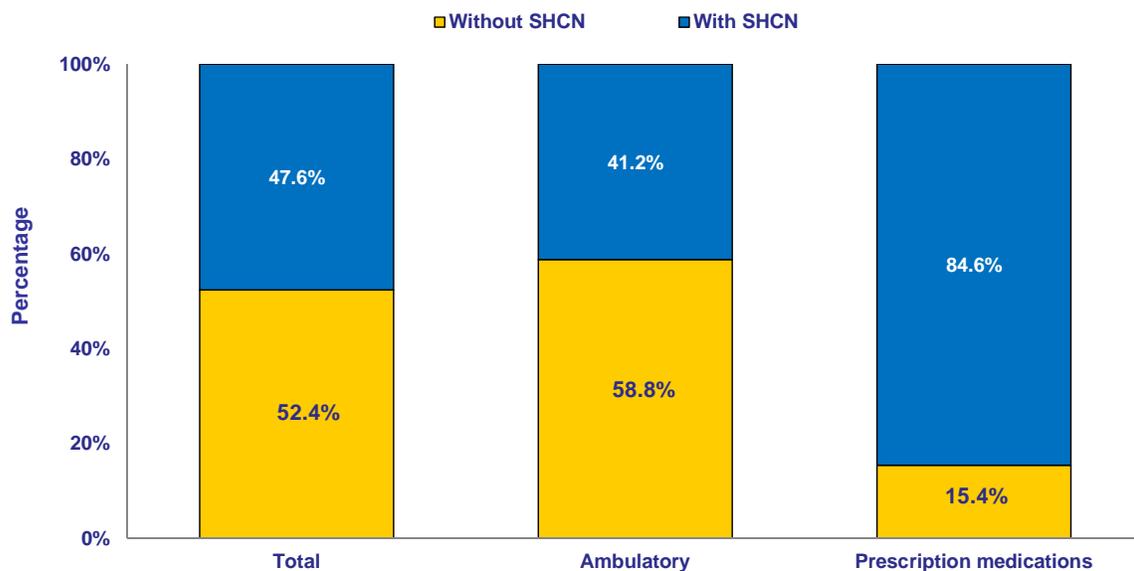
**Figure 1. Percentage of children under age 18 reported as having special health care needs by demographic characteristics, 2008**



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2008



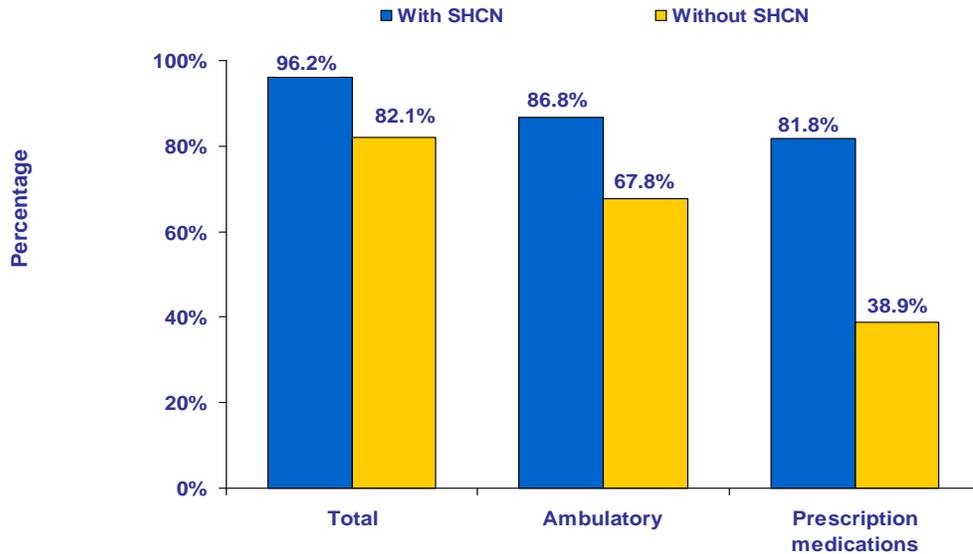
**Figure 2. Percentage distribution of total medical expenditures for children under age 18, by special health care needs (SHCN) status and type of service, 2008**



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2008



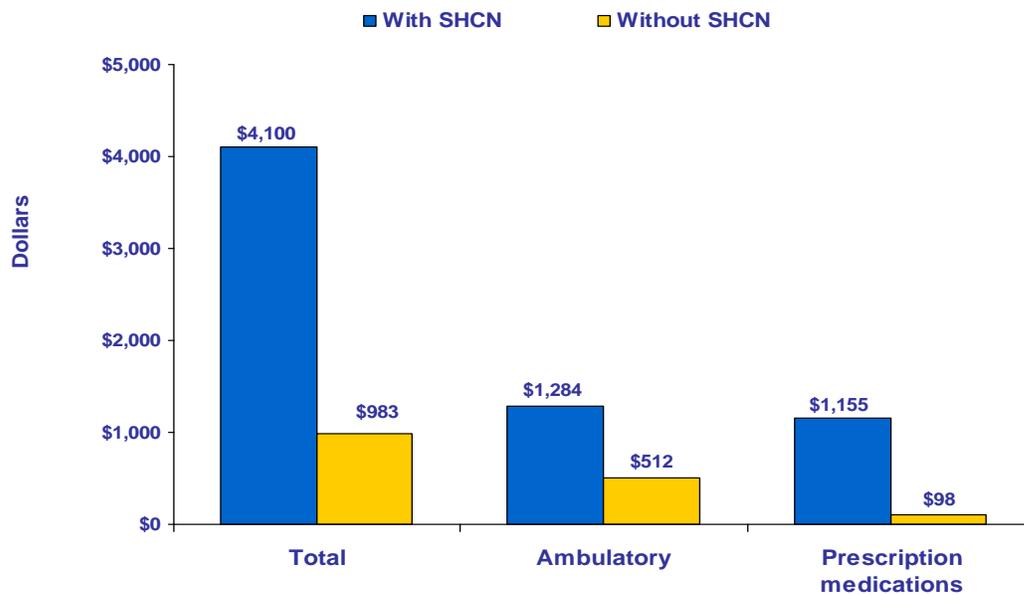
**Figure 3. Percentage of children under age 18 with expenditures, by special health care needs (SHCN) status and type of service, 2008**



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2008



**Figure 4. Mean expenditures per child for children under age 18\*, by special health care needs (SHCN) status and type of service, 2008**

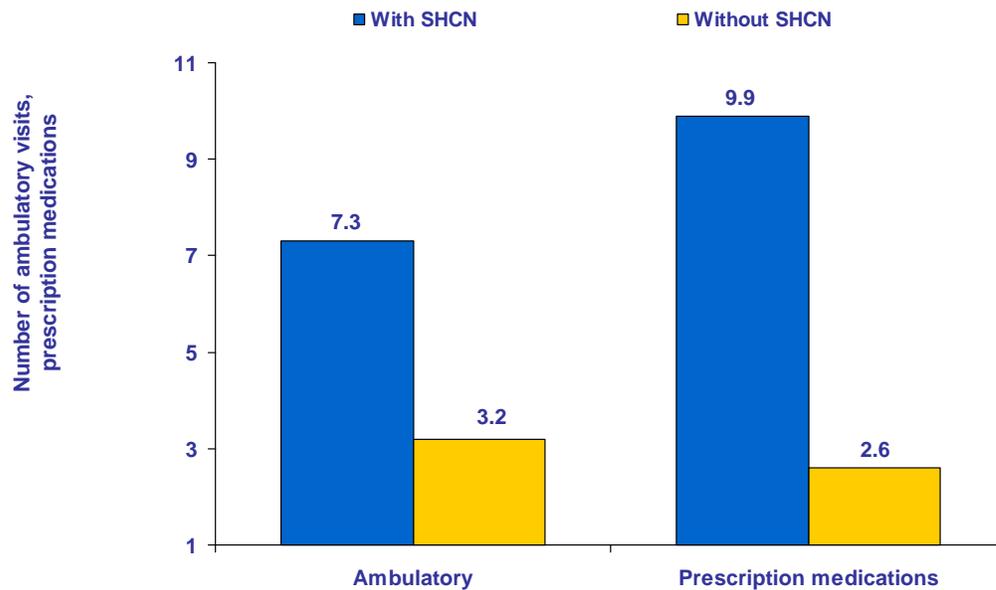


\*Among those with any expenses for specific health care service

Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2008



**Figure 5. Mean number of ambulatory visits and prescription medications per child for children under age 18\*, by special health care needs (SHCN) status, 2008**



\*Among those with the specific health care service

Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2008