



# STATISTICAL BRIEF #353

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# Dental Expenditures in the 10 Largest States, 2008

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### Introduction

Dental care accounted for 7.3 percent of health care expenditures among the U.S. noninstitutionalized civilian population in 2008. Over 40 percent of the U.S. population had dental care expenditures, and among those with dental care expenditures, the mean expenditure was \$671.

Many factors can influence dental care expenses in a particular state, including the demographic, socioeconomic, and health status characteristics of the population. The generosity of health insurance plans' coverage for dental services and the prevalence of dental insurance may also vary across state populations, which would affect dental care use and expenses.

The Household Component of the Medical Expenditure Panel Survey (MEPS-HC) is designed to produce estimates of the health care use, expenditures, sources of payment, and insurance coverage among the U.S. noninstitution-alized civilian population. While the MEPS-HC was designed primarily to ensure reliable estimates at the national and regional level for a large variety of population subgroups, the survey does permit design-based estimates for certain measures, such as those regarding dental care expenditures, to be made at the state level for some of the largest states (by population size). Though unbiased, these state-level estimates tend to have much larger sampling variances associated with them compared to the national estimates because the sample sizes of respondents and the number of counties sampled are necessarily smaller at the state level.

This Statistical Brief presents estimates based on data from the MEPS-HC on the use, expenditures, and sources of payments for dental expenditures for persons in the civilian U.S. population in 2008 for the 10 largest states. In total, these 10 states account for roughly half of the U.S. population as well as half of the total health care expenditures in 2008. This Brief examines selected spending measures for the population, including 1) the percentage with dental care expenditures, 2) the mean expenditure among persons with dental care expenditures, 3) the percentage of dental care expenditures paid by private insurance, and 4) the percentage paid out of pocket.

The state estimates are compared to the U.S. estimate, and only those estimates which are statistically different from the U.S. estimate at the .05 level of significance are noted in the text. Due to the difference in their sampling errors, an estimate in one state which is closer to the U.S. estimate may be significantly different while an estimate in another state which is further from the U.S. estimate may not be significantly different.

# **Highlights**

- In 2008, the percentage of persons with dental expenditures was lower than the national average in Texas, Florida, and Georgia.
- Compared to the national average, the mean expense among persons with dental expenses was lower in Ohio and North Carolina.
- Compared to the nation, Florida had a lower percentage of dental expenses paid by private insurance; and California had a lower percentage paid out of pocket.

# **Findings**

In 2008, 41.2 percent of the civilian noninstitutionalized U.S. population had dental care expenditures (figure 1). This percentage was lower in Texas (30.4 percent), Florida (34.2 percent), and Georgia (30.2 percent).

The mean expenditure for dental care in the U.S. was \$671 in 2008 (figure 2). The mean expenditure was lower in Ohio (\$509) and North Carolina (\$508).

Nationally, 41.8 percent of dental expenses in 2008 were paid by private insurance (figure 3). The percentage paid by private insurance was lower in Florida (30.9 percent).

In 2008, 49.7 percent of dental expenses were paid out of pocket nationally (figure 4). The percentage paid out of pocket was lower in California (42.1 percent).

### **Data Source**

The estimates shown in this Statistical Brief are drawn from analyses conducted by MEPS staff using expenditure data from the following public use file: MEPS HC-121: 2008 Full Year Consolidated Data File, November 2010.

## **Definitions**

#### **Expenditures**

Expenditures include total payments from all sources to hospitals, physicians, other health care providers (including dental care and home health), pharmacies, and providers of other medical equipment for services reported by respondents in the MEPS-HC. Sources include direct payments from individuals, private insurance (including TRICARE), Medicare, Medicaid, and various other sources (including the Department of Veterans Affairs, Workers' Compensation, and miscellaneous public sources).

### Dental expenditures

This subcategory of expenditures includes those expenses for any type of dental care.

## **PSUs**

Primary sampling units (PSUs) are the geographic areas of the country where the sample of households that participate in the MEPS is ultimately selected each year. Though a new set of households is selected into the MEPS each year, the set of PSUs from which they are selected remains fixed over roughly a 10-year period.

### Sampling variance

The sampling variance of an estimate measures the uncertainty about the estimate due to the sampling. All sample estimates have uncertainty associated with them because they are based on the data collected from only a sample (a subset) of the population. The estimates would most likely be different if the data had come from a different sample of the [same] population. The sampling variance measures how different those estimates are likely to be. Estimates with high variances have high uncertainty (low precision), and those with low variances have low uncertainty (high precision).

## **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. noninstitutionalized civilian population. It is cosponsored by the Agency for Healthcare Research and Quality and the National Center for Health Statistics.

MEPS expenditure data are derived from both the Medical Provider Component (MPC) and Household Component (HC). MPC data are generally used for hospital-based events (e.g., inpatient stays, emergency room visits, and outpatient department visits), prescribed medicine purchases, and home health agency care. Office-based physician care estimates use a mix of HC and MPC data while estimates for non-physician office visits, dental and vision services, other medical equipment and services, and independent provider home health care services are based on HC provided data. Details

on the estimation process can be found at <a href="http://www.meps.ahrq.gov/mepsweb/">http://www.meps.ahrq.gov/mepsweb/</a> data files/publications/mr19/mr19.pdf

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

For a detailed description of the MEPS-HC survey design, sample design, and methods used to minimize sources of nonsampling error, 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. <a href="http://www.meps.ahrq.gov/mepsweb/data\_files/publications/mr1/mr1.pdf">http://www.meps.ahrq.gov/mepsweb/data\_files/publications/mr1/mr1.pdf</a>

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Sommers, J.P. *Producing State Estimates with the Medical Expenditure Panel Survey-Household Component*. Agency for Healthcare Research and Quality Working Paper No. 05011, March 2005.

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. <a href="http://www.meps.ahrq.gov/mepsweb/data\_files/publications/mr22/mr22.pdf">http://www.meps.ahrq.gov/mepsweb/data\_files/publications/mr22/mr22.pdf</a>

## **Suggested Citation**

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AHRQ welcomes questions and comments from readers of this publication who are interested in obtaining more information about access, costs, 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 email us at MEPSProjectDirector@ahrq.hhs.gov or send a letter to the address below:

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