

## STATISTICAL BRIEF #167

March 2007

### **The Five Most Costly Conditions, 2000 and 2004: Estimates for the U.S. Civilian Noninstitutionalized Population**

*Anita Soni, PhD*

#### **Introduction**

Health care expenditures have been on the rise in the U.S. Traditionally, the treatment and care for some diseases have cost more than for others. The Household Component of the Medical Expenditure Panel Survey (MEPS-HC) provides critical information for evaluating trends in health care expenditures.

This Statistical Brief presents data from the MEPS-HC regarding medical expenditures associated with the top five most costly conditions in 2000 and 2004. These top five conditions—heart disease, cancer, trauma-related disorders, mental disorders, and pulmonary conditions—were determined by totaling and ranking the expenses for the medical care delivered for the diagnosis and treatment of acute and chronic conditions. Only differences between estimates that are statistically significant at the 0.05 level are discussed in the text.

#### **Findings**

In terms of health care expenditures, the top five most costly conditions remained the same in 2000 and 2004. There was an increase in the expenditures for each of these conditions. The top five most costly conditions were heart disease, trauma-related disorders, cancer, pulmonary conditions, and mental disorders. During this period, the highest rise in expenditures was for heart disease. The expenditures for this condition rose from \$61.8 billion in 2000 (in 2004 dollars) to 90.0 billion in 2004 (figure 1). Medical expenditures on cancer also increased substantially from 2000 (in 2004 dollars) to 2004, going from \$42.4 billion to \$62.2 billion.

Heart disease had the largest share of medical expenditures in both 2000 and 2004. In 2000, 10.0 percent of total health expenditures were spent on the treatment of heart disease, followed by trauma-related disorders (7.4 percent) (figure 2). Cancer, pulmonary conditions, and mental disorders were comparable at 6.9 percent, 6.4 percent, and 6.1 percent, respectively. In 2004, heart disease expenditures also accounted for 10.0 percent of the total expenditures, followed by cancer at 6.9 percent. Expenditures on trauma-related disorders accounted for 6.5 percent.

For mean expenditures per person with expenses, the mean expenditures in both 2000 and 2004 were highest for cancer (\$4,577 and \$5,727, respectively) and heart disease (\$3,581 and \$4,506, respectively) (figure 3). Pulmonary conditions had the lowest mean expenditures per person in both 2000 and 2004 (\$922 and \$1,042, respectively) among the top five most costly conditions.

#### **Highlights**

- Five medical conditions—heart disease, cancer, trauma-related disorders, mental disorders, and pulmonary conditions—ranked highest in terms of direct medical spending in 2000 and 2004.
- Medical expenditures increased the most for heart disease and cancer between 2000 and 2004.
- The biggest increase in the number of people accounting for expenses was for mental disorders. The number increased by almost 10 million persons from 2000 to 2004.
- Among these five medical conditions, the mean expenditures per person were highest for cancer and heart disease in both 2000 and 2004.

The number of people with expenditures associated with each of these five most costly conditions increased from 2000 to 2004. The biggest increase in people accounting for expenditures was for mental disorders (23.9 million and 33.8 million, respectively) (figure 4).

In 2004, the largest percentage of heart disease expenses was paid by Medicare (45.5 percent) (figure 5). Medicare payments were lowest for mental health disorders (13.5 percent). In 2000, the largest portion of expenditures that was paid by private insurance was for the treatment of cancer (43.0 percent). Of these top five most costly conditions, private insurance paid the lowest for treatment of mental disorders (28.0 percent).

## Data Source

The estimates in this Statistical Brief for 2004 were derived from MEPS 2004 Full Year Data File (HC-089) and Medical Conditions File (HC-087). For 2000, the estimates were drawn from the 2000 Full Year Data File (HC-050) And Medical Conditions File (HC-052).

## Definitions

### *Medical conditions*

Conditions data were collected from household respondents during each round as verbatim text and coded by professional coders using the International Classification of Diseases, Ninth Revision (ICD-9). ICD-9-CM condition codes were then aggregated into clinically meaningful categories that group similar conditions using Clinical Classification Software (CCS). Categories were collapsed when appropriate. Note that the reported ICD-9-CM condition code values were mapped to the appropriate clinical classification category prior to being collapsed to three-digit ICD-9-CM condition codes. The result is that every record that has an ICD-9-CM diagnosis code also has a clinical classification code. For this Statistical Brief, the following CCS codes were used: cancer, 11-45; heart conditions: 96, 97, 100-108; pulmonary conditions (COPD [chronic obstructive pulmonary disease], asthma) 127-134; trauma, 225-236, 239, 240, 244; and mental disorders, 650-663.

### *Expenditures*

Expenditures refer to what is paid for health care services. More specifically, expenditures in MEPS are defined as the sum of direct payments for care provided during the year, including out-of-pocket payments and payments by private insurance, Medicaid, Medicare, and 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 not included.

Expenditure estimates for 2000 were inflated to 2004 dollars using the GDP Price Index, National Income and Product Accounts, Bureau of Economic Analysis, available at <http://www.bea.gov/bea/dn/nipaweb/index.asp>. Expenditures may be associated with more than one condition and are not unduplicated in the condition totals; summing over conditions will double-count some expenses. Total spending does not include other medical expenses, such as durable and nondurable supplies, medical equipment, eyeglasses, ambulance services, and dental expenses, because they could not be linked to specific conditions.

## 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 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 (301-427-1656) or visit the MEPS Web site at <http://www.meps.ahrq.gov/>.

## References

For a detailed description of the MEPS 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.

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.

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

Cohen, J. and Krauss, N. Spending and Service Use among People with the Fifteen Most Costly Medical Conditions, 1997. *Health Affairs*, 22(2):129-138, 2003.

### **Suggested Citation**

Soni, A. *The Five Most Costly Conditions, 2000 and 2004: Estimates for the U.S. Civilian Noninstitutionalized Population*. Statistical Brief #167. March 2007. Agency for Healthcare Research and Quality, Rockville, Md. [http://www.meps.ahrq.gov/mepsweb/data\\_files/publications/st167/stat167.pdf](http://www.meps.ahrq.gov/mepsweb/data_files/publications/st167/stat167.pdf)

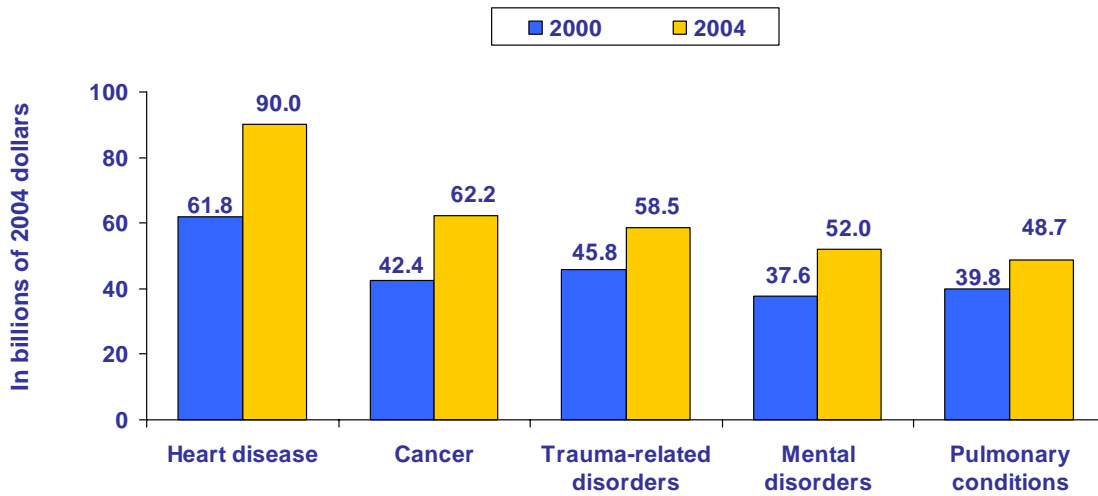
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AHRQ welcomes questions and comments from readers of this publication who are interested in obtaining more information about access, cost, use, financing, and quality of health care in the United States. We also invite you to tell us how you are using 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 [mepsd@ahrq.gov](mailto:mepsd@ahrq.gov) or send a letter to the address below:

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



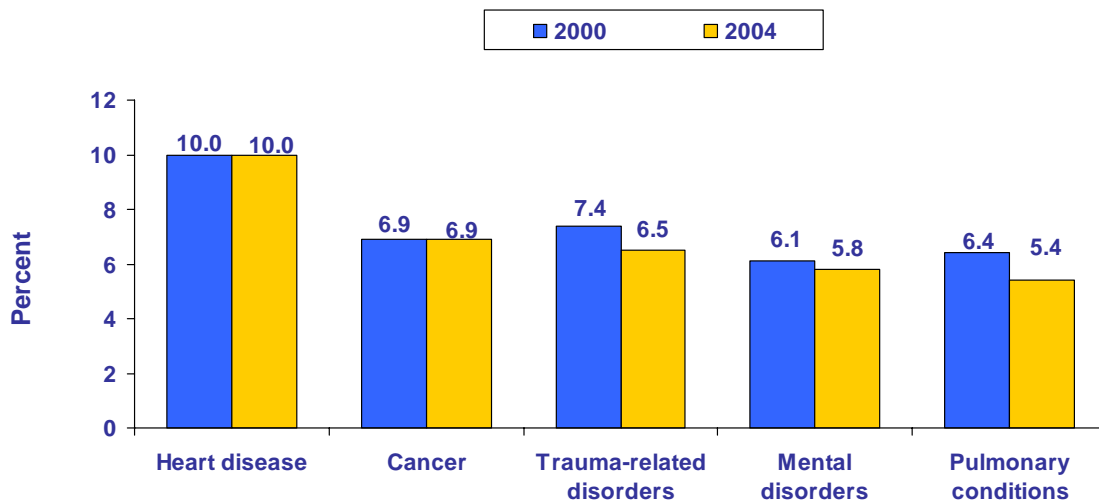
**Figure 1. Expenditures for the top five most costly conditions, 2000 and 2004**



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2000 and 2004



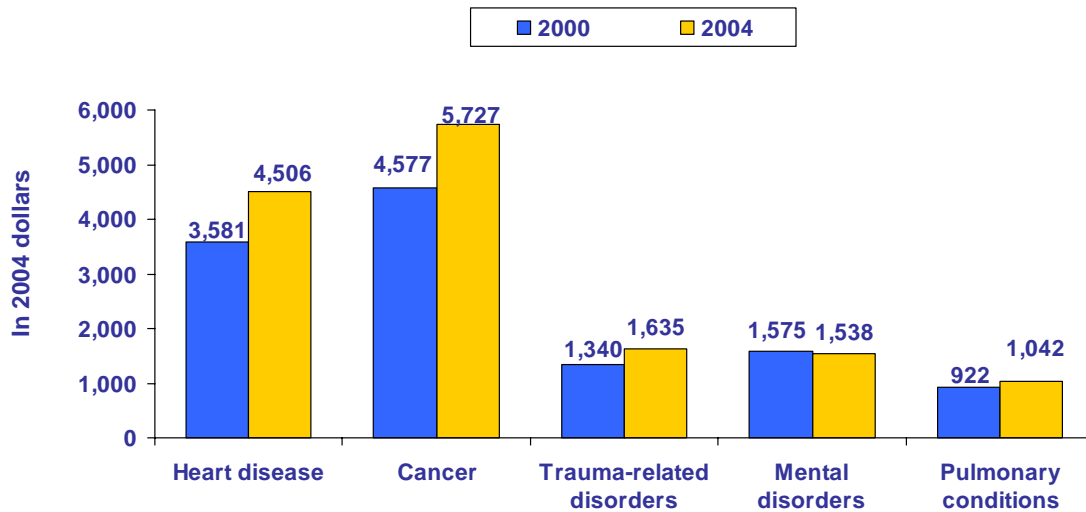
**Figure 2. The top five most costly conditions as a percentage of total expenditures, 2000 and 2004**



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2000 and 2004



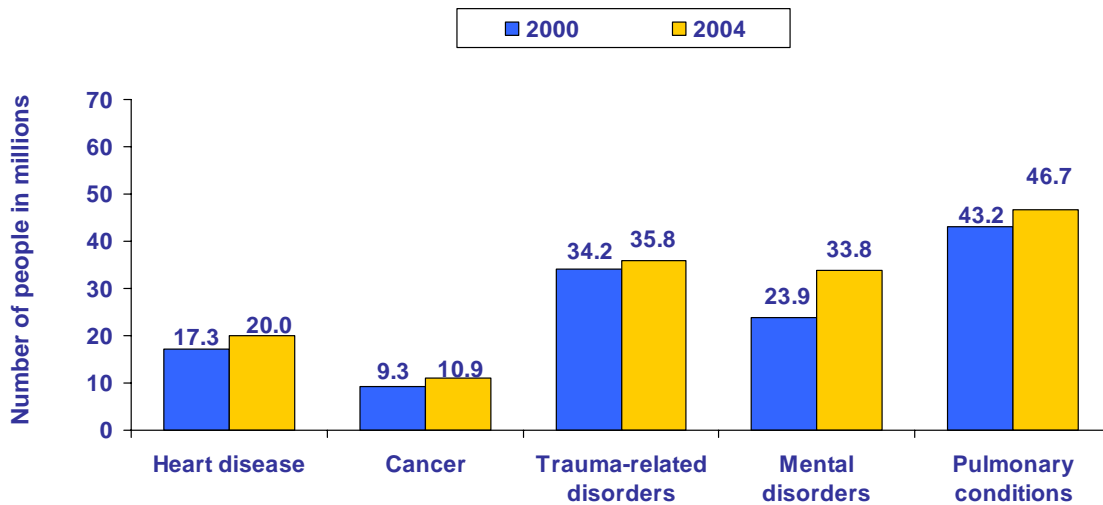
**Figure 3. Average expenditures per person with expenses for the top five most costly conditions, 2000 and 2004**



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2000 and 2004



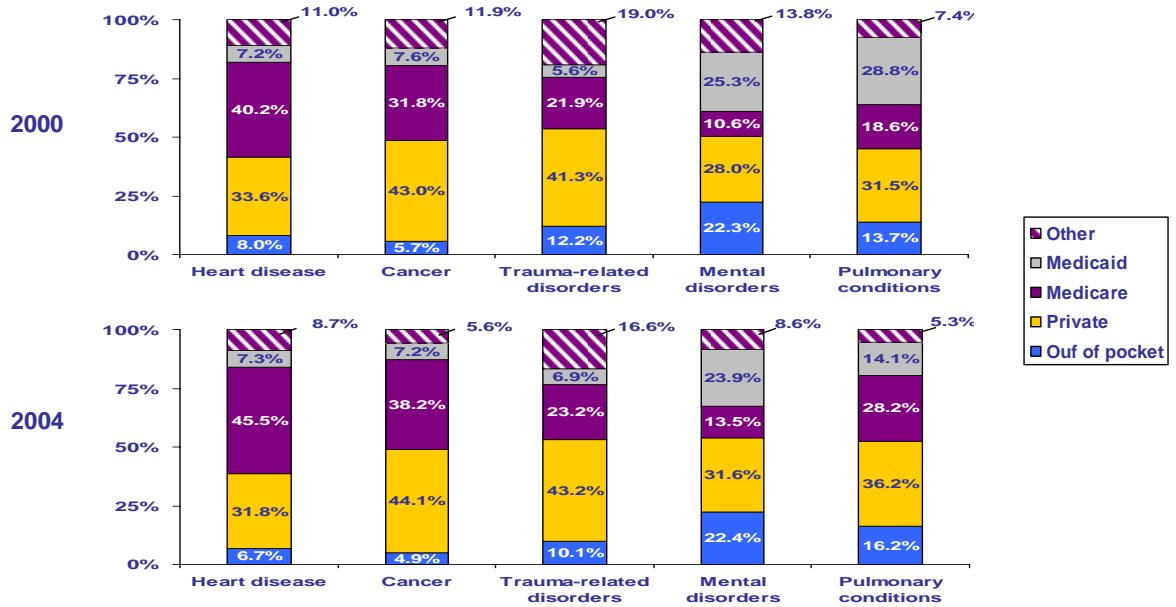
**Figure 4. Number of people with expenses for the top five most costly conditions, 2000 and 2004**



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2000 and 2004



**Figure 5. Distribution of total expenditures by source of payment for the top five most costly conditions, 2000 and 2004**



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2000 and 2004