

## STATISTICAL BRIEF #377

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### Trends in Use and Expenditures for Depression among U.S. Adults Age 18 and Older, Civilian Noninstitutionalized Population, 1999 and 2009

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#### Introduction

Depression is a medical illness that causes a persistent feeling of sadness and loss of interest in everyday activities. Symptoms of depressed mood or loss of interest is present for weeks and interferes with everyday activities. Diagnosis and treatment of depression has grown over the past few years among both women and men.

This Statistical Brief presents estimates, based on the Household Component of the Medical Expenditure Panel Survey (MEPS-HC), of service utilization and expenditures for ambulatory care and prescribed medications to treat depression among the U.S. adult civilian noninstitutionalized population. Average annual estimates for the years 1999 and 2009 are shown by type of service and source of payment. Expenditures are expressed in 2009 dollars. All differences between estimates noted in the text are statistically significant at the 0.05 level or better.

#### Findings

##### *Number of adults treated for depression, by sex*

In 2009, 17.6 million adults visited a doctor or health facility, or obtained a prescription drug to treat depression (figure 1). In 1999, the same was true for 10.1 million adults. In both 1999 and 2009, the number of women seeking treatment for depression was higher than the number of men (12.5 million women versus 5.1 million men in 2009; and 7.3 million women versus 2.8 million men in 1999).

##### *Total health care expenditures for depression, by sex*

A total of \$22.8 billion was spent on treatment for depression in 2009 and \$18.0 billion in 1999 (figure 2). In both years, higher amounts were spent for treatment of women with depression compared with men. Expenditures in 2009 totaled \$16.7 billion for women compared to \$6.1 billion for men. In 1999, a total of \$14.7 billion was spent on women and \$3.3 billion on men.

##### *Total and mean health care expenditures for depression, by type of service*

Ambulatory expenditures on depression more than doubled, from \$3.7 billion in 1999 to \$8.2 billion in 2009 (figure 3). Prescription medicine expenditures also more than doubled between these years, from \$5.2 billion in 1999 to \$12.0 billion in 2009. Among persons with any expenses for depression, the average expenditures per person for ambulatory care visits increased from \$657 in 1999 to \$991 in 2009. Per person expenditures on prescription medicines also increased between 1999 and 2009, from \$574 per person to \$742 per person (figure 4).

##### *Distribution of annual health care expenditures for depression, by type of service and source of payment*

In 2009, ambulatory care expenditures accounted for 35.8 percent of total expenditures for the treatment of depression which was substantially higher than the 20.8 percent of total expenditures that accounted for treatment of depression in 1999. Prescription medicine expenditures related to depression almost doubled, from 28.8 percent of the total expenditures in 1999 to 52.8 percent of total expenditures in 2009 (figure 5).

In 2009, more than one-fifth (21.4 percent) of total expenditures for the treatment of depression were paid out of pocket as compared to 13.4 percent in 1999 (figure 6).

#### Data Source

The estimates shown in this Statistical Brief are based on data from the MEPS 1999 and 2009 Full Year Consolidated Data Files (HC-038 and HC-129), Medical Conditions Files (HC-037 and HC-128), Office-Based Medical Provider Visits Files (HC-033G and HC-126G), Outpatient Visits Files (HC-033F and HC-126F), Hospital Inpatient Stays Files (HC-033D and HC-126D), Home Health Files (HC-033H and HC-126H), Emergency Room Visits Files (HC-033E and HC-126E), and Prescribed Medicines Files (HC-033A and HC-126A).

#### Highlights

- In 2009, almost 18 million adults received treatment for depression. This represented a 74 percent increase in the number of people receiving treatment in 1999, when 10.1 million adults received treatment for depression.
- Medical spending to treat depression totaled \$22.8 billion in 2009.
- Ambulatory expenditures for treatment of depression more than doubled between 1999 and 2009, from \$3.7 billion to \$8.2 billion.
- Mean annual prescription drug expenditures for those with an expense related to depression increased from \$574 per person in 1999 (in 2009 dollars) to \$742 per person in 2009.

## Definitions

### *Depression*

This Brief analyzes individuals with depression reported as a condition bothering the person and depression reported in connection with reported health care utilization (e.g., a person who reported purchasing a drug was asked what condition the drug was intended to treat) or reported disability days. Conditions reported by respondents were recorded by interviewers as verbatim text, and were coded by professional coders to fully specified ICD-9-CM codes. Conditions with ICD-9 codes of 296, 300, and 311 were classified as depression.

### *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. Expenditure data for 1999 were adjusted to 2009 dollars using the Consumer Price Index (CPI) and all estimates in this Brief are reported in 2009 dollars. Dental or other medical expenditure are not included in these estimates. These expenditures do not include any 'over-the-counter' medications.

### *Sources of payment*

- *Private insurance*: This category includes payments made by insurance plans covering hospital and other medical care (excluding payments from Medicare, Medicaid, and other public sources), Medigap plans, and TRICARE (Armed Forces-related coverage).
- *Medicare*: Medicare is a federally financed health insurance plan for the elderly, persons receiving Social Security disability payments, and persons with end-stage renal disease. Medicare Part A, which provides hospital insurance, is automatically given to those who are eligible for Social Security. Medicare Part B provides supplementary medical insurance that pays for medical expenses and can be purchased for a monthly premium. Medicare Part D, which started in 2006, covers prescription drug expenses.
- *Medicaid/CHIP*: This category includes payments made by the Medicaid and CHIP programs which are means-tested government programs financed jointly by federal and state funds that provide health care to those who are eligible. Medicaid is designed to provide health coverage to families and individuals who are unable to afford necessary medical care while CHIP provides coverage to additional low income children not eligible for Medicaid. Eligibility criteria for both programs vary significantly by state.
- *Out-of-pocket*: This category includes expenses paid by the user or other family member.
- *Other sources*: This category includes payments from other federal sources such as Indian Health Service, military treatment facilities, and other care provided by the federal government; various state and local sources (community and neighborhood clinics, state and local health departments, and state programs other than Medicaid/CHIP); various unclassified sources (e.g., automobile, homeowner's, or other liability insurance, and other miscellaneous or unknown sources); Medicaid/CHIP payments reported for persons who were not reported as enrolled in the Medicaid or CHIP programs at any time during the year; and private insurance payments reported for persons without any reported private health insurance coverage during the year.

## 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) 427-1656 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 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://meps.ahrq.gov/mepsweb/data\\_files/publications/mr1/mr1.pdf](http://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://meps.ahrq.gov/mepsweb/data\\_files/publications/mr2/mr2.pdf](http://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 depression, see the following publications:

Major depression: <http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001941/>

Depression Center: [www.webmd.com/depression/guide/depression-women](http://www.webmd.com/depression/guide/depression-women)

Depression: [www.mayoclinic.com/health/depression/DS00175/](http://www.mayoclinic.com/health/depression/DS00175/)

What is depression?: <http://www.nimh.nih.gov/health/publications/depression/index.shtml/>

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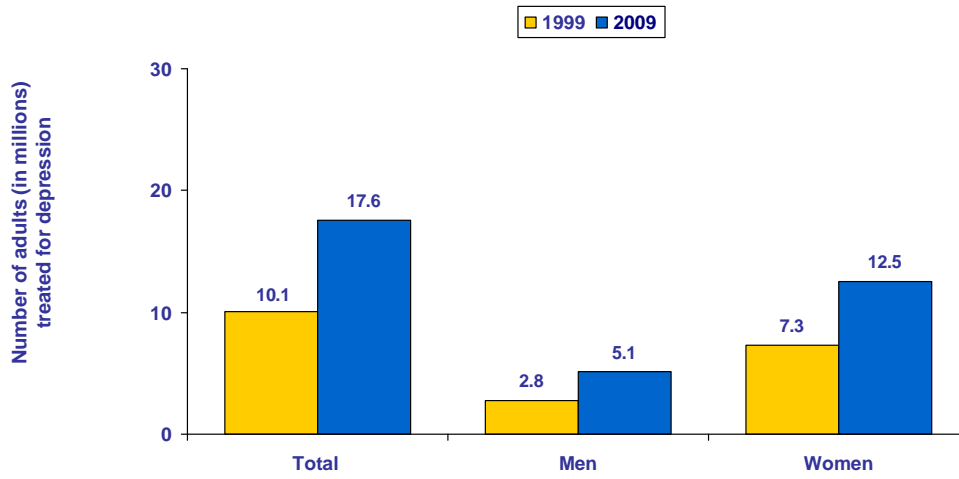
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AHRQ welcomes questions and comments from readers of this publication who are interested in obtaining more information about access, cost, use, financing, and quality of health care in the United States. We also invite you to tell us how you are using 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 [MEPSProjectDirector@ahrq.hhs.gov](mailto:MEPSProjectDirector@ahrq.hhs.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  
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Rockville, MD 20850



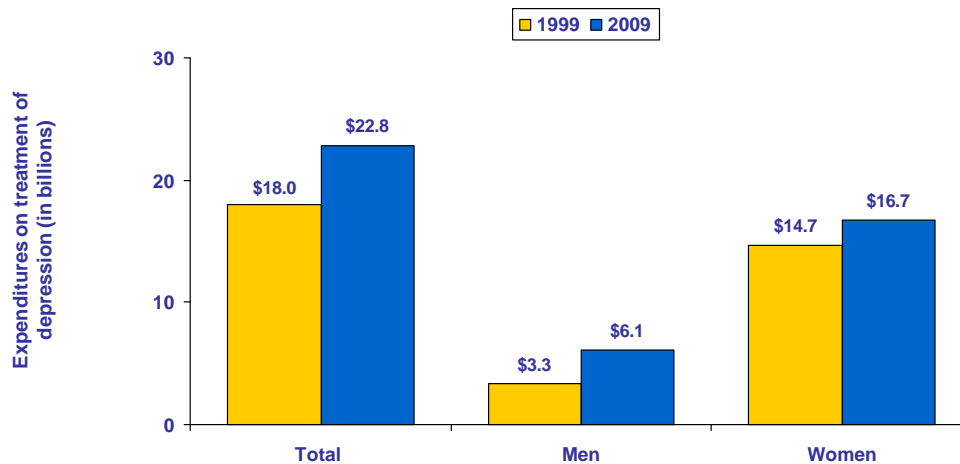
**Figure 1. Number of treated cases for depression among adults age 18 and older, by sex, 1999 and 2009**



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 1999 and 2009



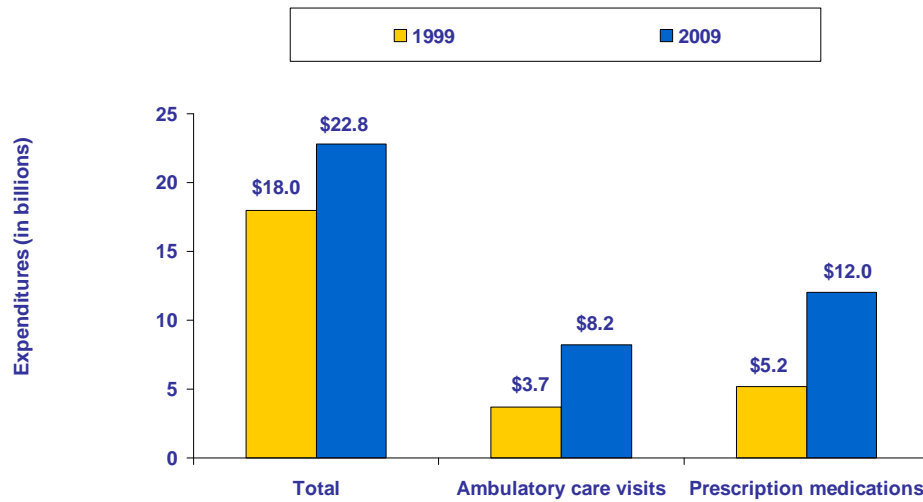
**Figure 2. Expenditures on the treatment of depression among adults age 18 and older, by sex, 1999 and 2009**



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 1999 and 2009



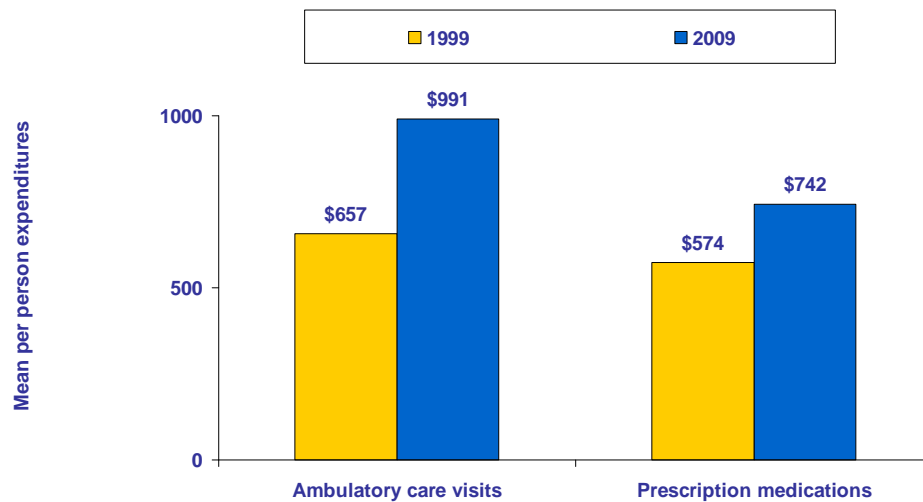
**Figure 3. Expenditures on the treatment of depression among adults age 18 and older, by type of service, 1999 and 2009**



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 1999 and 2009



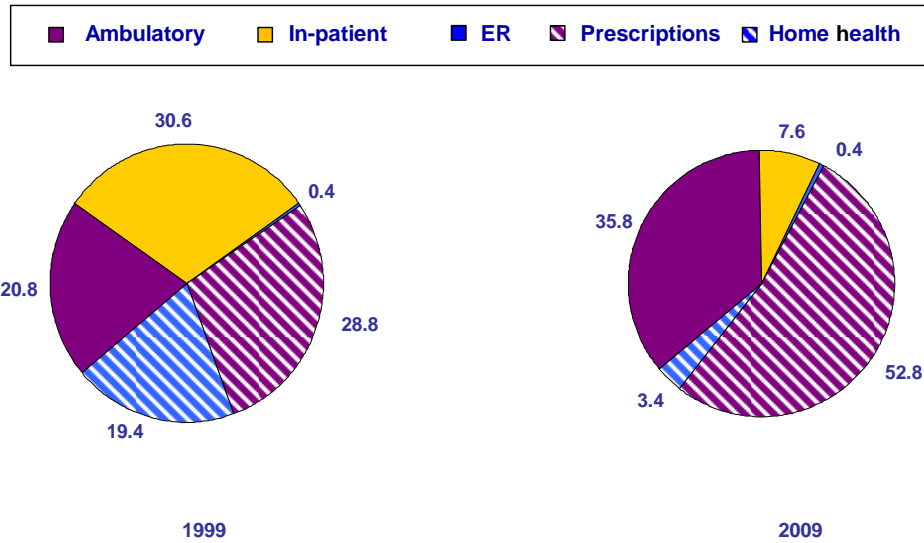
**Figure 4. Mean expenditures for treatment of depression, adults age 18 and older among those with an expense for depression, by type of service, 1999 and 2009**



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 1999 and 2009



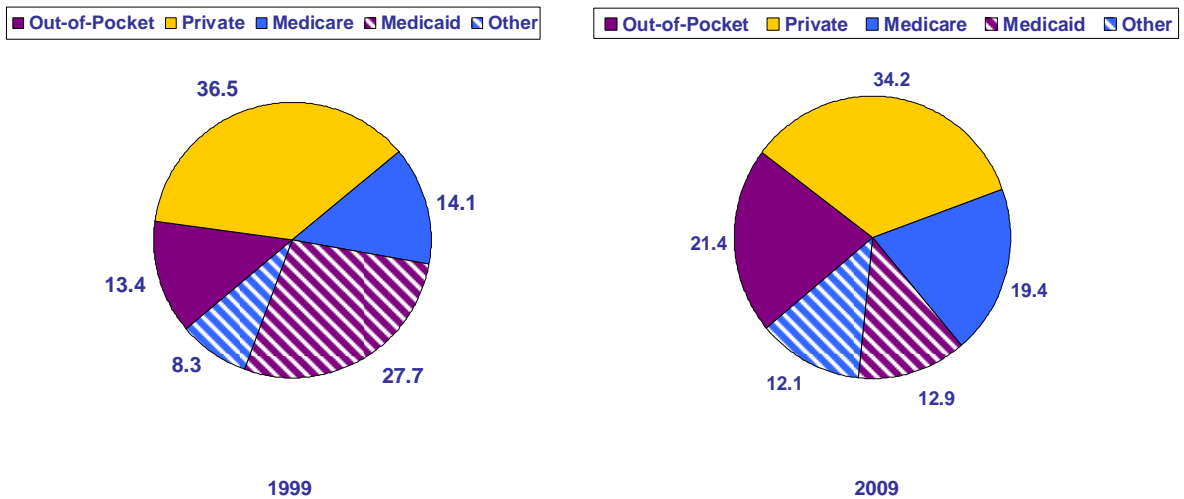
**Figure 5. Percentage distribution of expenditures for depression, by type of service, 1999 and 2009**



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 1999 and 2009



**Figure 6. Percentage distribution of expenditures for depression, by source of payment, 1999 and 2009**



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 1999 and 2009