

## STATISTICAL BRIEF #232

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# The Top Five Therapeutic Classes of Outpatient Prescription Drugs Ranked by Total Expense for Adults Age 18 and Older in the U.S. Civilian Noninstitutionalized Population, 2006

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### Introduction

This Statistical Brief provides a summary of the top five therapeutic classes of outpatient prescription drugs for adults age 18 and older when ranked by total expense, as reported by households in the U.S. civilian noninstitutionalized population in calendar year 2006. The Brief also provides estimates for the population, age 18 and older, on the percentage of annual prescribed drug expenses the top five therapeutic classes represented, the percentage of those with a prescribed drug expense having an expense in these classes of drugs, and the mean expense in these classes of drugs.

The estimates in this Brief are derived from the Household Component of the 2006 Medical Expenditure Panel Survey (MEPS-HC). Only prescribed medicines purchases in an outpatient setting are included in the estimates. Insulin and diabetic supplies and equipment are also included in MEPS prescribed medicines estimates. Over-the-counter medicines are excluded from these estimates as are prescription medicines administered in an inpatient setting or in a clinic or physician's office. All differences discussed in the text are statistically significant at the 0.05 level or better.

### Findings

In 2006, the top five therapeutic classes for prescribed drugs purchased by adults age 18 and older when ranked by total expense totaled \$130.8 billion and accounted for 62.8 percent of the \$208.1 billion total prescription drug expenses by adults (figure 1).

Metabolic agents ranked first in terms of total expenses at \$38.1 billion, closely followed by cardiovascular agents at \$33.1 billion. The remaining three top therapeutic classes in terms of expenditures were central nervous system agents (\$28.2 billion), psychotherapeutic agents (\$17.5 billion), and hormones (\$14.0 billion) (figure 2).

In 2006, annual expenses for metabolic agents and cardiovascular agents were the two highest among the total prescription drug

### Highlights

- In 2006, for adults, the top five therapeutic classes when ranked by total expense for prescription drugs were metabolic agents (\$38.1 billion), cardiovascular agents (\$33.1 billion), central nervous system agents (\$28.2 billion), psychotherapeutic agents (\$17.5 billion) and hormones (\$14.0 billion).
- Expenditures for the top five therapeutic classes when ranked by total expense totaled \$130.8 billion and accounted for more than sixty percent (62.8 percent) of total expenditures spent on prescription drugs by the adult population (\$208.1 billion) in 2006.
- During 2006, metabolic agents prescription medicine expenses accounted for 18.3 percent of total prescription drug expenses by adults.
- Forty-six percent of the adult population with a prescribed drug expense in 2006 purchased a central nervous system agent.
- In 2006, of the top five therapeutic classes; psychotherapeutic agents had the highest average expense per prescription (\$91.54), almost double the average expense of the therapeutic class with the lowest average expense, cardiovascular agents (\$46.54).

expenses by the adult population. Expenditures on these two accounted for 18.3 percent and 16.0 percent, respectively. Central nervous system agents represented 13.5 percent of total prescribed drugs purchased by adults in 2006, which was higher than psychotherapeutic agents (8.4 percent) and hormones (6.8 percent) (figure 3).

In 2006, for adults with a prescribed drug expense, central nervous system agents had the highest percentage of adults (45.5 percent) purchasing at least one prescription as compared to the other four categories in the top five therapeutic classes of prescription drugs when ranked by total expense. The percentage of adults purchasing cardiovascular agents (38.9 percent) was higher than the percentage of adults purchasing hormones (29.7 percent), metabolic agents (28.9 percent), or psychotherapeutic agents (16.9 percent) (figure 4).

Psychotherapeutic agents and metabolic agents were the two highest therapeutic classes with a mean expense per prescription of \$91.54 and \$86.90, respectively, of the top five therapeutic classes when ranked by total expense for adults in 2006. Average per person expense per prescription in these two categories was higher than the average expense for the remaining three classes in the top five: central nervous system agents (\$62.59), hormones (\$48.15), and cardiovascular agents (\$46.54) (figure 5).

## Data Source

The estimates shown in this Statistical Brief are based on data from the MEPS 2006 Full Year Consolidated Data File (HC-105), and Prescribed Medicines File (HC-102A).

## Definitions/Methodology

Therapeutic classes were assigned to drugs using Multum Lexicon variables from Cerner Multum, Inc. Please note, the therapeutic class of central nervous system agents includes the large subclass of analgesics; the therapeutic class of psychotherapeutic agents includes the large subclass of antidepressants; and the therapeutic class metabolic agents includes the large subclasses of antihyperlipidemic agents and antidiabetic agents.

Please note, periodically, Cerner Multum makes changes to the Multum Lexicon therapeutic classification system. As an example, antihyperlipidemic agents, which had been its own therapeutic class in the 2003 and 2004 data, were reclassified as a therapeutic subclass of the new therapeutic class, metabolic agents in 2005 and 2006 data. Changes to the Multum Lexicon therapeutic classification system should be kept in mind when comparing therapeutic class rankings from year to year.

For additional information on these and other Multum Lexicon variables, as well as the Multum Lexicon database itself, refer to the following Web site: <http://www.multum.com/Lexicon.htm>.

## 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 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. [http://www.meps.ahrq.gov/mepsweb/data\\_files/publications/mr1/mr1.shtml](http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr1/mr1.shtml)

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.shtml](http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr2/mr2.shtml)

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, TM, 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.shtml](http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr22/mr22.shtml)

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[http://www.meps.ahrq.gov/mepsweb/data\\_files/publications/st232/stat232.pdf](http://www.meps.ahrq.gov/mepsweb/data_files/publications/st232/stat232.pdf)

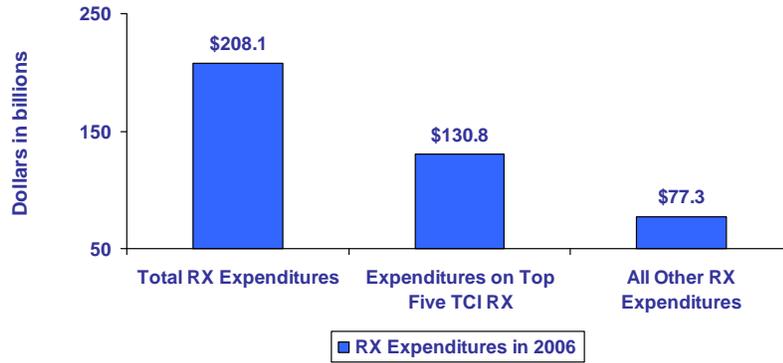
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AHRQ welcomes questions and comments from readers of this publication who are interested in obtaining more information about access, cost, use, financing, and quality of health care in the United States. We also invite you to tell us how you are using 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:

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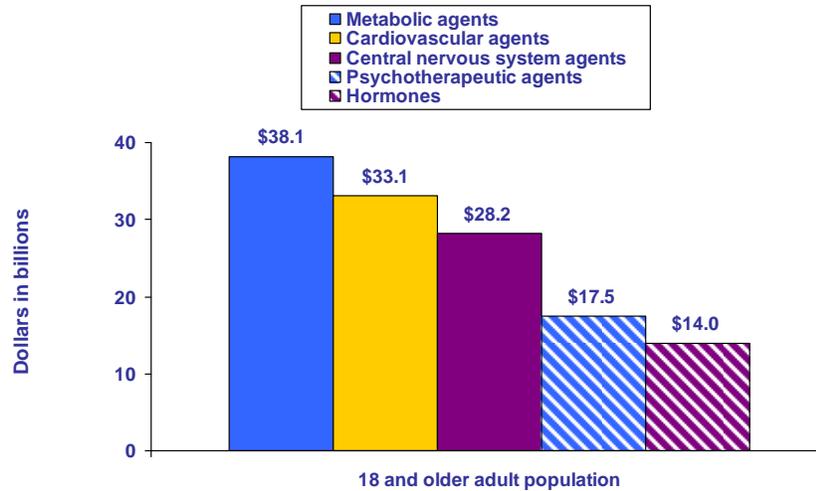
**Figure 1. Total expenditures on prescriptions, by top five therapeutic classifications for prescribed drugs ranked by total expense for adults, 2006**



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2006



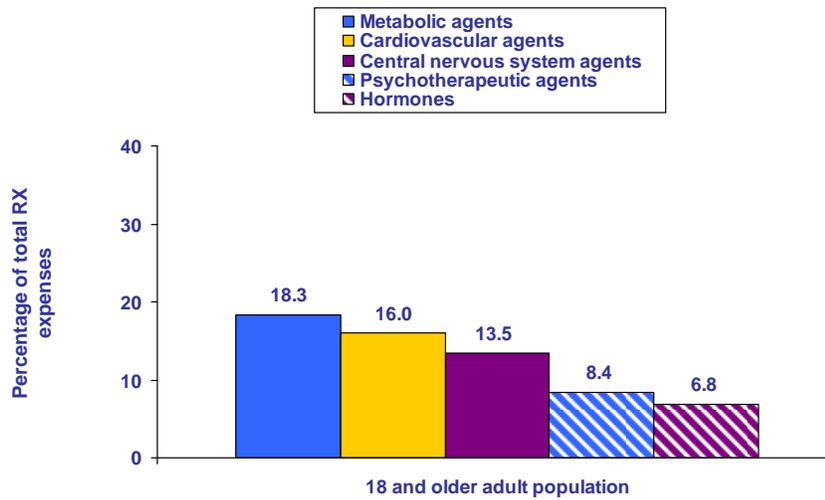
**Figure 2. Top five therapeutic classifications for prescribed drugs ranked by total expense for adults, 2006**



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2006



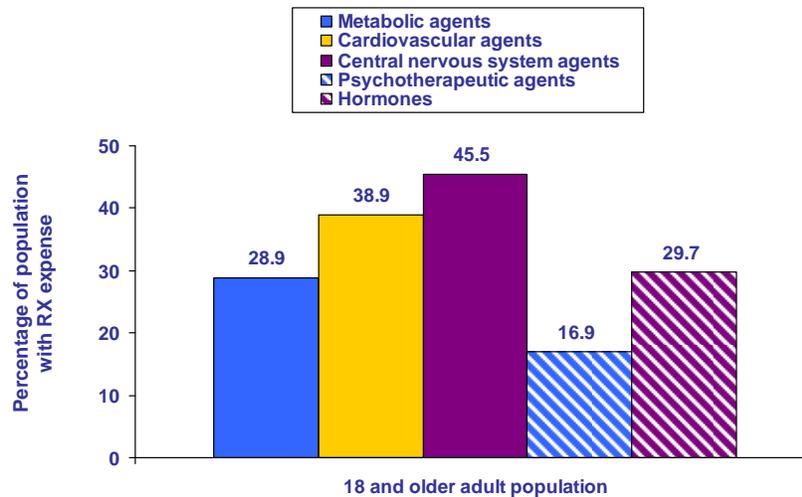
**Figure 3. Percentage of total prescribed drug expenses by the adult population that the top five therapeutic classes represent, ranked by annual expense, 2006**



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2006



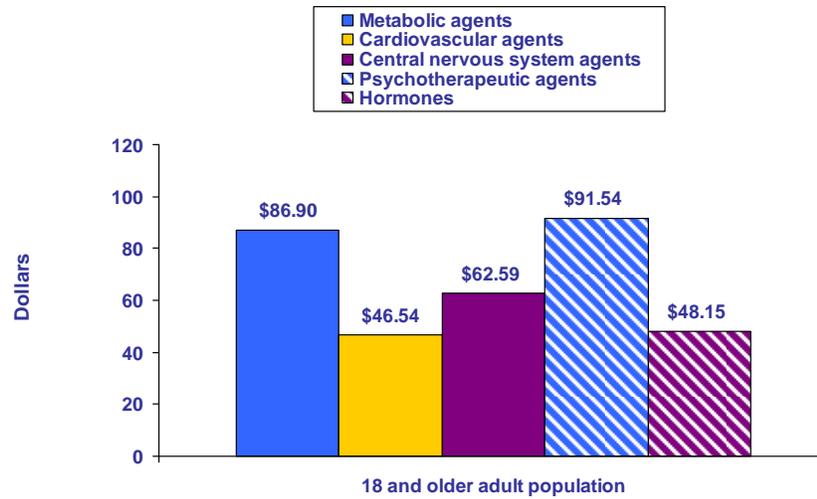
**Figure 4. Percentage of adults with a prescribed drug expense having an expense in the top five therapeutic classes ranked by total expense, 2006**



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2006



**Figure 5. Average expense per prescription for the top five therapeutic classes of prescribed drugs ranked by total expense for adults, 2006**



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2006