

STATISTICAL BRIEF #238

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The Top Five Therapeutic Classes of Outpatient Prescription Drugs Ordered by Total Expense for the Medicare Population Age 65 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 when ordered by total expense for Medicare beneficiaries age 65 and older, in the U.S. civilian noninstitutionalized population in calendar year 2006. The Brief also provides estimates for the Medicare population age 65 and older on the percentage of annual prescribed drug expenses for the top five therapeutic classes represented, the percentage of those with a prescribed drug expense having an expense in the top five 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 included in MEPS prescribed medicines estimates. Over-the-counter medicines are excluded from these estimates, as are prescription medicines administered in an inpatient setting, clinic, or physician's office. All differences discussed in the text are statistically significant at the 0.05 level.

Findings

In 2006, when ordered by total expenses, the top five therapeutic classes for prescribed drugs purchased by the Medicare population age 65 and older totaled \$50.9 billion and accounted for 69.8 percent of the \$73.0 billion total prescription drug expenses by elderly Medicare beneficiaries (figure 1).

Metabolic agents (\$16.9 billion) and cardiovascular agents (\$16.4 billion) were highest in terms of total expenses and were more than double the total expenses for each of the remaining top five therapeutic classes: central nervous system agents (\$7.3 billion), gastrointestinal agents (\$5.5 billion), and respiratory agents (\$4.8 billion) (figure 2).

Highlights

- In 2006, for Medicare beneficiaries age 65 and older, the top five therapeutic classes when ordered by total expense were metabolic agents (\$16.9 billion), cardiovascular agents (\$16.4 billion), central nervous system agents (\$7.3 billion), gastrointestinal agents (\$5.5 billion), and respiratory agents (\$4.8 billion).
- Annual expenditures for the top five therapeutic classes when ordered by total expense totaled \$50.9 billion and represented 69.8 percent of annual expenditures spent on prescription drugs by the Medicare population age 65 and older (\$73.0 billion) in 2006.
- In 2006, metabolic agents accounted for nearly a quarter (23.1 percent) of prescription drug spending by Medicare beneficiaries age 65 and older.
- Three-quarters of Medicare beneficiaries age 65 and older with a prescribed drug expense had a cardiovascular agent expense (74.5 percent) in 2006, which was a higher percentage than any of the other top five therapeutic classes of drugs.
- The average drug expense per prescription for gastrointestinal agents (\$93.77) was highest among the top five therapeutic classes of drugs, and was more than double the average expense for cardiovascular agents (\$45.15).

In 2006, annual expenses for metabolic agents represented almost a quarter (23.1 percent) of total prescription drug expenses by the Medicare population age 65 and older. This percentage was followed closely by cardiovascular agents (22.5 percent) which was more than double of the percentage for any of the remaining three of the top five therapeutic classes (central nervous system agents, 10.0 percent; gastrointestinal agents, 7.5 percent; and respiratory agents, 6.6 percent) (figure 3).

In 2006, three-fourths of Medicare beneficiaries age 65 and older with a prescribed drug expense purchased at least one cardiovascular agent (74.5 percent), a greater percentage than the remaining four categories in the top five therapeutic classes of prescription drugs ordered by total expense. In addition, more than half (54.7 percent) of the Medicare beneficiaries age 65 and older with a prescribed drug expense purchased at least one metabolic agent. Among the top five therapeutic classes, the lowest percentage of Medicare beneficiaries age 65 and older with a prescribed drug expense purchased respiratory agents (21.8 percent). Purchases of central nervous system agents and gastrointestinal agents were at 47.1 percent and 28.0 percent respectively among the top five therapeutic classes of prescribed drugs among Medicare beneficiaries age 65 and older with a prescribed drug expense purchase (figure 4).

Among the top five therapeutic classes for Medicare beneficiaries age 65 and older in 2006, cardiovascular agents had the lowest average expense per prescription (\$45.15). The highest average expense per prescription was for the gastrointestinal agents (\$93.77). The average expenses for metabolic agents (\$87.14) and respiratory agents (\$85.48) were higher than the average expenses for central nervous system agents (\$56.85) (figure 5).

Data Source

The estimates shown in this Statistical Brief are based on data from the MEPS 2006 Full Year Consolidated File (HC-105) and Prescribed Medicine 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; 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

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

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

Suggested Citation

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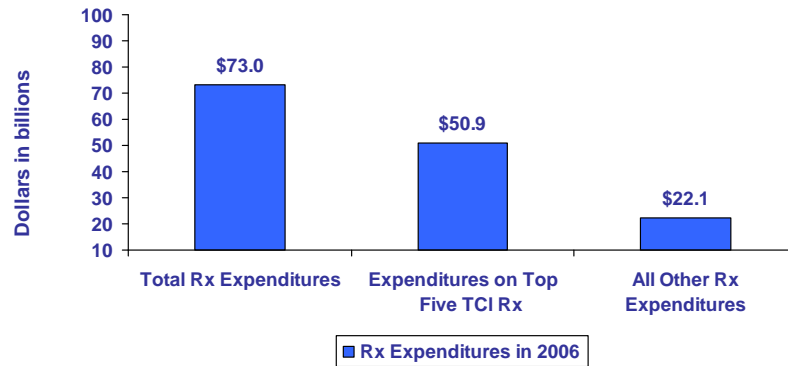
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AHRQ welcomes questions and comments from readers of this publication who are interested in obtaining more information about access, cost, use, financing, and quality of health care in the United States. We also invite you to tell us how you are using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

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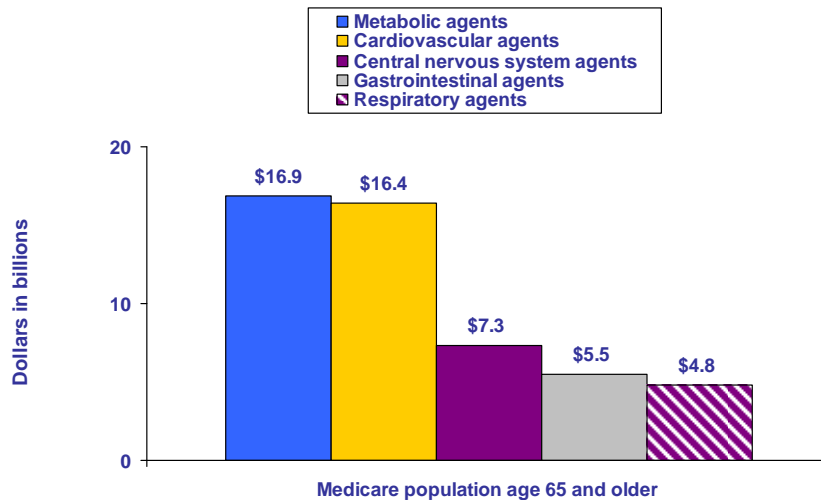
Figure 1. Total expenditures on prescriptions, by top five therapeutic classifications for prescribed drugs ordered by total expense for Medicare beneficiaries age 65 and older, 2006



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



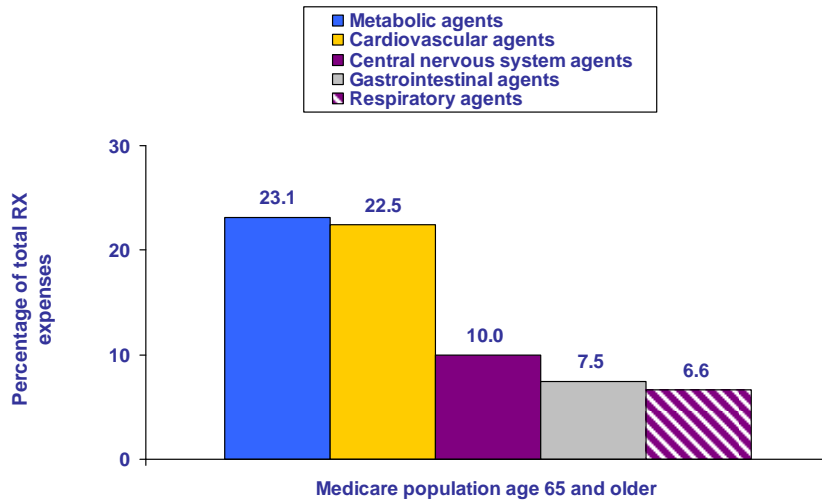
Figure 2. Top five therapeutic classifications for prescribed drugs ordered by total expense for Medicare beneficiaries age 65 and older, 2006



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



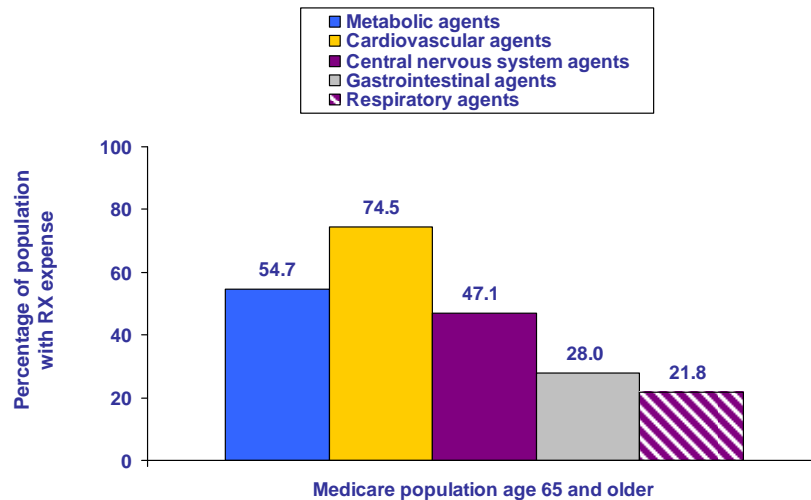
Figure 3. Percentage of total prescribed drug expenses among the Medicare population age 65 and older for the top five therapeutic classes ordered by total expense, 2006



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



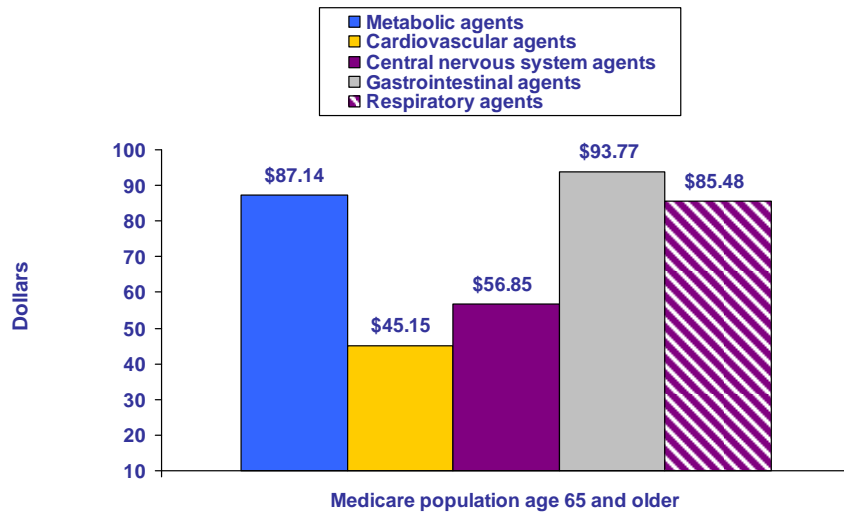
Figure 4. Percentage of the Medicare population age 65 and older with a prescribed drug expense having an expense in the top five therapeutic classes ordered by total expense, 2006



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 ordered by total expense for the Medicare population age 65 and older, 2006



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