STATISTICAL BRIEF #410

May 2013

Expenditures for the Top Five Therapeutic Classes of Outpatient Prescription Drugs, Adults Age 18 and Older, U.S. Civilian Noninstitutionalized Population, 2010

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Introduction

This Statistical Brief provides descriptive statistics on expenditures for the top five therapeutic classes of outpatient prescription drugs, ranked by total expenses in 2010 for adults age 18 and older in the U.S. civilian noninstitutionalized population. Prescription drug therapeutic classes are defined according to the Multum/Lexicon therapeutic classification system (see "Definitions"). In 2010, 18 broad therapeutic classifications were identified.

The estimates presented are derived from the Household and Pharmacy Components of the 2010 Medical Expenditure Panel Survey (MEPS). Expenditures include payments from all sources (e.g., out of pocket, private, and public insurance sources) for outpatient prescription drug purchases during 2010. 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 2010, the top five therapeutic classes of prescribed drugs purchased by adults age 18 and older (ranked by total expense) accounted for 61 percent ($153.4 billion) of the $253.3 billion total prescription drug expenses by adults (figure 1).

Metabolic agents had the highest total expenses ($49.0 billion) among the top five therapeutic classes for adults age 18 and over (figure 2). The second through fifth highest therapeutic classes respectively in terms of total expenditures were central nervous system agents ($34.0 billion), cardiovascular agents ($28.0 billion), psychotherapeutic agents ($24.1 billion), and gastrointestinal agents ($18.3 billion). When expressed as percentages of all prescribed medicine expenses for adults, these classes ranged from 19.4 percent for metabolic agents to 7.2 percent for gastrointestinal agents (figure 3).

Among the U.S. adult population, 30.9 percent purchased central nervous system agents (figure 4). Cardiovascular agents were purchased by 28.3 percent of the population and a little less than one-fourth (23.3 percent) of the population purchased metabolic agents. A smaller portion of the population purchased psychotherapeutic agents (12.4 percent) or gastrointestinal agents (12.2 percent).

Highlights

- In 2010, the top five therapeutic classes of prescription drugs ranked by total expense among adults were: metabolic agents, central nervous system agents, cardiovascular agents, psychotherapeutic agents, and gastrointestinal agents.

- Expenditures for the top five therapeutic classes totaled $153.4 billion and accounted for about 60 percent of total expenditures on prescription drugs purchased for the adult population in 2010.

- Expenses for metabolic agents accounted for a little less than one-fifth of total prescription drug expenses for adults in 2010.

- About one-third of the adult population purchased a central nervous system agent in 2010.

- In 2010, among the top five therapeutic classes of drugs, average expense per prescription for gastrointestinal and psychotherapeutic agents was almost three times the average expense of cardiovascular agents.

In terms of average expense per prescription (figure 5), gastrointestinal ($113) and psychotherapeutic ($112) agents were the highest among the top five therapeutic classes, followed by metabolic agents ($93), central nervous system agents ($65), and cardiovascular agents ($38).

Data Source

The estimates shown in this Statistical Brief are based on data from the MEPS HC-138: 2010 Full Year Consolidated Data File and HC-135A: 2010 Prescribed Medicines File.

Definitions

Therapeutic classifications
Therapeutic class and subclass were assigned to MEPS prescribed medicines using Multum Lexicon variables from Cerner Multum, Inc. MEPS prescribed medicines files were linked to the Multum Lexicon database to obtain therapeutic class and subclass variables.

Therapeutic class cardiovascular agents include calcium channel blockers and diuretics; central nervous system agents include the analgesics, anticonvulsants, and antiparkinson agents. The therapeutic class of gastrointestinal agents includes the H2-receptor antagonists, antacids, antidiarrheals, and proton pump inhibitors; metabolic agents include the subclasses of antihyperlipidemic agents and antidiabetic agents; and psychotherapeutic agents include the subclass of antidepressants and antipsychotics.

Cerner Multum occasionally makes changes to the Multum Lexicon therapeutic classification system. For example, antihyperlipidemic agents was its own therapeutic class in the 2003 and 2004 data, but was reclassified as a therapeutic subclass of the new therapeutic class, metabolic agents in 2005.

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.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://www.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

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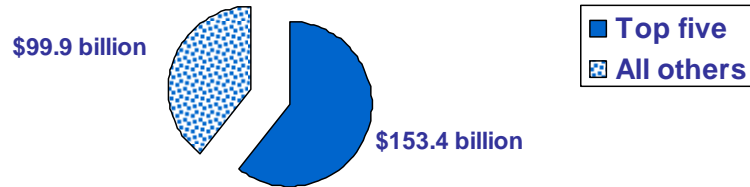
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AHRQ welcomes questions and comments from readers of this publication who are interested in obtaining more information about access, cost, use, financing, and quality of health care in the United States. We also invite you to tell us how you are using 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 email us at 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
540 Gaither Road
Rockville, MD 20850

Figure 1. Expenditures for top five therapeutic classifications of prescribed drugs relative to total prescription medication expenses for adults age 18 and older, 2010
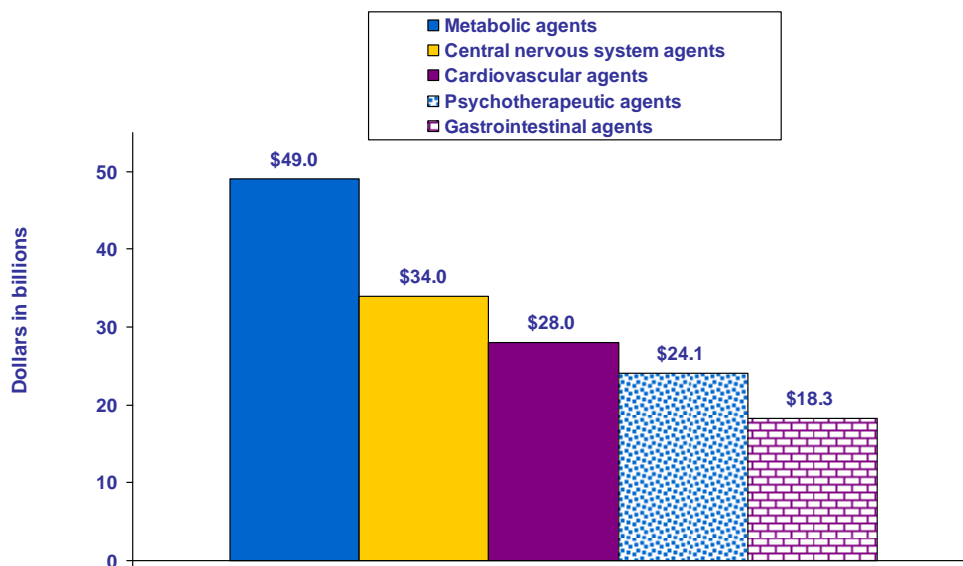
Total RX Expenditures = $253.3 billion

$99.9 billion

$153.4 billion

■ Top five
⊡ All others

Source: Center for Financing, Access, and Cost Trends, AHRQ, Household and Pharmacy Components of the Medical Expenditure Panel Survey, 2010

Figure 2. Top five therapeutic classifications of prescribed drugs ranked by total expenses for adults age 18 and older, 2010

■ Metabolic agents
■ Central nervous system agents
■ Cardiovascular agents
⊡ Psychotherapeutic agents
⊡ Gastrointestinal agents

Dollars in billions

$49.0
$34.0
$28.0
$24.1
$18.3

Source: Center for Financing, Access, and Cost Trends, AHRQ, Household and Pharmacy Components of the Medical Expenditure Panel Survey, 2010

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Figure 3. Percentage of the total medical expenses for the top five therapeutic classifications of drugs for adults age 18 and older, 2010

- Metabolic agents
- Central nervous system agents
- Cardiovascular agents
- Psychotherapeutic agents
- Gastrointestinal agents

Percentage of total RX expenses

- 19.4
- 13.4
- 11.0
- 9.5
- 7.2

Source: Center for Financing, Access, and Cost Trends, AHRQ, Household and Pharmacy Components of the Medical Expenditure Panel Survey, 2010
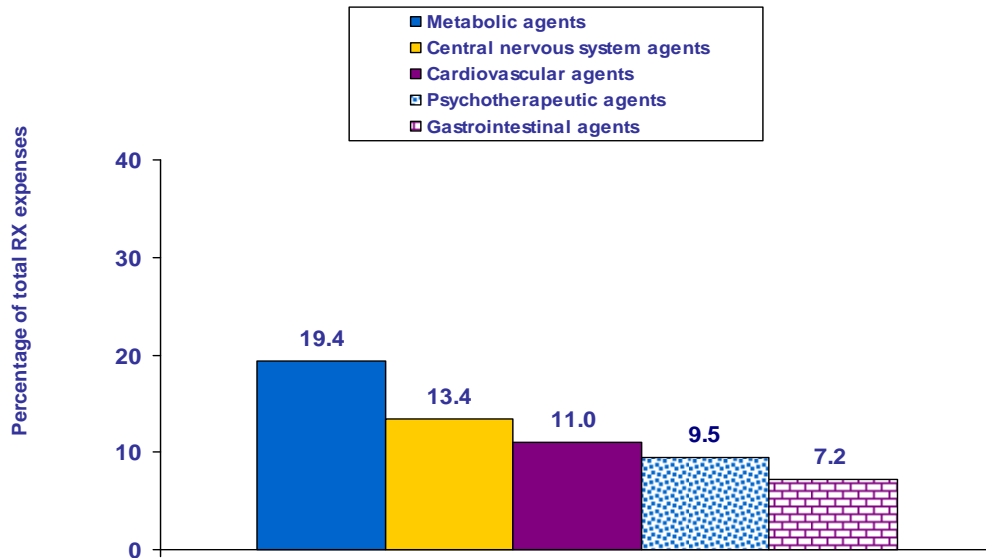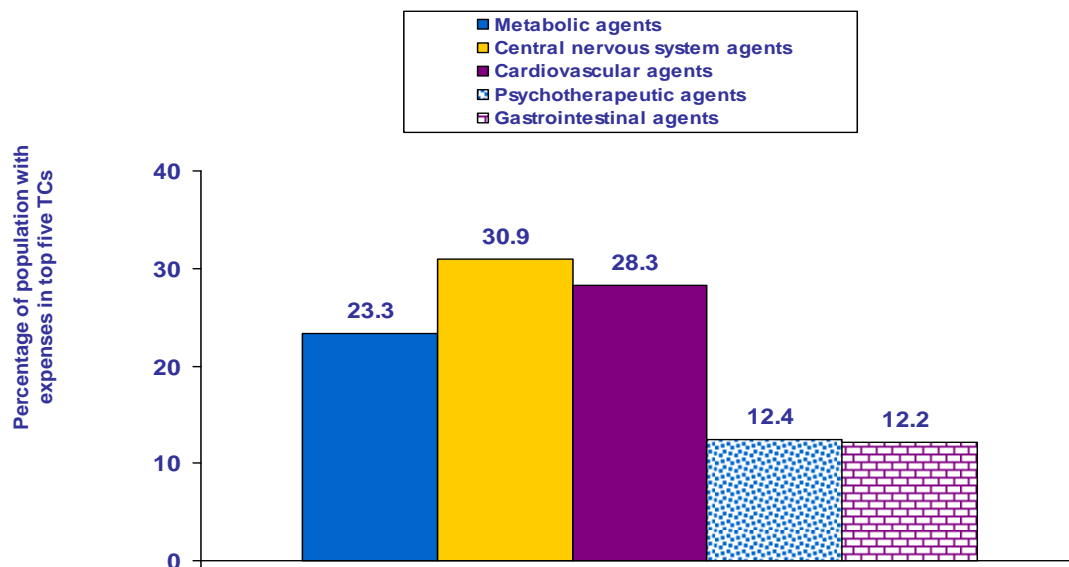

Figure 4. Percentage of adults with expenses in the top five therapeutic classifications, adults age 18 and older, 2010

- Metabolic agents
- Central nervous system agents
- Cardiovascular agents
- Psychotherapeutic agents
- Gastrointestinal agents

Percentage of population with expenses in top five TCs

- 23.3
- 30.9
- 28.3
- 12.4
- 12.2

Source: Center for Financing, Access, and Cost Trends, AHRQ, Household and Pharmacy Components of the Medical Expenditure Panel Survey, 2010

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Figure 5. Average expense per prescription for adults age 18 and older, by therapeutic classification, 2010

Legend:
- Metabolic agents
- Central nervous system agents
- Cardiovascular agents
- Psychotherapeutic agents
- Gastrointestinal agents

Therapeutic classification	Dollars
Metabolic agents	$93
Central nervous system agents	$65
Cardiovascular agents	$38
Psychotherapeutic agents	$112
Gastrointestinal agents	$113

Source: Center for Financing, Access, and Cost Trends, AHRQ, Household and Pharmacy Components of the Medical Expenditure Panel Survey, 2010

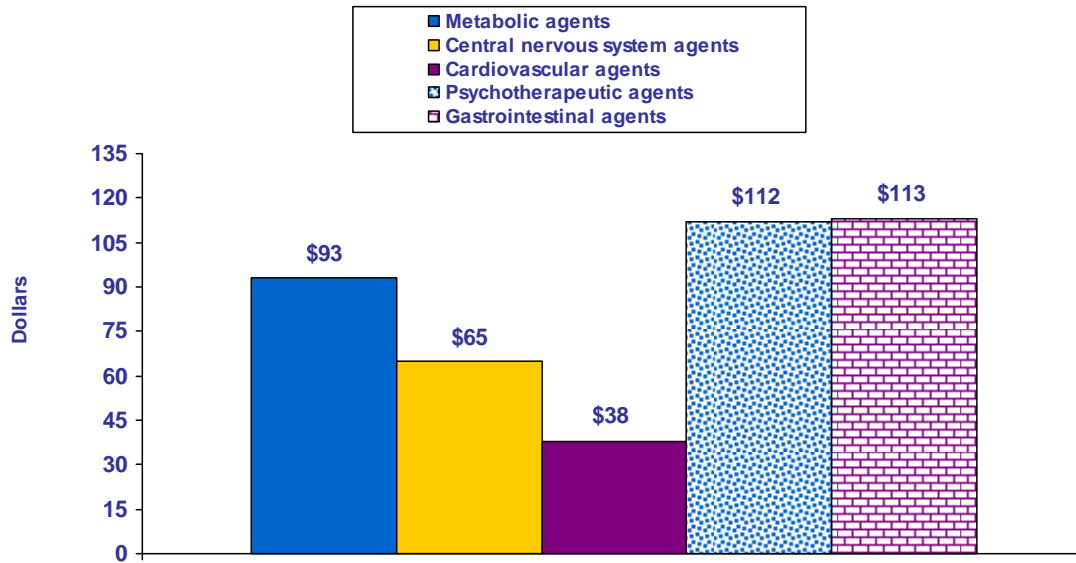Statistical Brief #410: Expenditures for the Top Five Therapeutic Classes of Outpatient Prescription Drugs, Adults Age 18 and Older, U.S. Civilian Noninstitutionalized Population, 2010