

STATISTICAL BRIEF #478

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Trends in Prescribed Outpatient Opioid Use and Expenses in the U.S. Civilian Noninstitutionalized Population, 2002-2012

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Introduction

This Statistical Brief presents estimates of use and expenses for outpatient prescribed opioids for the U.S. civilian noninstitutionalized population from 2002 through 2012.

The Brief examines trends in the number of persons purchasing at least one outpatient prescription opioid, and total expenses and total number of prescriptions, as well as average annual cost per person and total and average out of pocket costs.

Only prescriptions purchased or obtained in an outpatient setting are included in these estimates. Prescription medicines administered in an inpatient setting or in a clinic or physician's office are excluded. Expense estimates for 2002 were inflated to 2012 dollars based on the GDP Price Index (http://www.meps.ahrq.gov/mepsweb/about_meps/Price_Index.shtml).

All differences between estimates discussed in the text are statistically significant at the 0.05 level.

Findings

In 2002, MEPS estimates show that 27.2 million people purchased one or more outpatient prescribed opioids in the U.S. civilian noninstitutionalized population, and in 2012 the total number of people purchasing one or more prescribed outpatient opioid increased to 36.7 million (figure 1).

When comparing 2002 and 2012, MEPS estimates showed growth in the total number of outpatient prescription purchases of opioids, rising from 85.9 million purchases to 143.9 million purchases, an increase of 67.5 percent (figure 2).

Among the U.S. civilian noninstitutionalized population, total expenses (in 2012 dollars) for outpatient prescription opioids increased approximately 120 percent, rising from \$4.1 billion to \$9.0 billion, when comparing 2002 with 2012 (figure 3).

The mean annual expense (in 2012 dollars) per person for outpatient prescribed opioids for those with an expense increased when comparing 2002 with 2012, rising from \$149 to \$246, approximately a 65 percentage increase (figure 4).

When comparing 2002 with 2012, total out of pocket expense (in 2012 dollars) for outpatient prescribed opioids decreased from \$2.3 billion to \$1.6 billion, a 30.4 percentage decrease (figure 5).

In 2002, the average annual out of pocket expense (in 2012 dollars) for prescribed outpatient opioids for those with an expense was \$85 and decreased to \$45 in 2012, a decrease of 47.1 percent (figure 6).

Data Source

The estimates in this Statistical Brief are based upon data from the MEPS Prescribed Medicines Data Files 2002–2012 (HC-67A, HC-77A, HC-85A, HC-94A, HC-102A, HC-110A, HC-118A, HC-126A, HC-135A, HC-144A, and HC-152A).

Definitions

Purchases and expenses

Utilization was defined as purchasing or obtaining opioids in the year of interest. Refills as well as original prescriptions are included in expense and utilization estimates. Expenses include the total direct payments from all sources to

Highlights

- Among the U.S. civilian noninstitutionalized population, total expenses (in 2012 dollars) for outpatient prescription opioids more than doubled, increasing from \$4.1 billion to \$9.0 billion, when comparing 2002 with 2012.
- When comparing 2002 with 2012, total prescription opioid purchases increased from 85.9 million to 143.9 million among the U.S. civilian noninstitutionalized population.
- The total number of people in the U.S. civilian noninstitutionalized population purchasing one or more outpatient prescribed opioid increased from 27.2 million to 36.7 million among the U.S. civilian noninstitutionalized population when comparing 2002 with 2012.
- When comparing 2002 with 2012, the mean annual real expense (in 2012 dollars) for outpatient prescribed opioids for those with an expense increased from \$149 to \$246.

pharmacies for prescriptions reported by respondents in the MEPS-HC. Expense estimates for 2002 were adjusted to 2012 dollars based on the GDP Price Index (http://www.meps.ahrq.gov/mepsweb/about_meps/Price_Index.shtml).

Out of pocket includes expenses paid by the user or other family member.

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. The following was used to define opioids in 2002 through 2012—therapeutic subclasses: narcotic analgesics and narcotic analgesic combinations. For additional information on these and other Multum Lexicon variables, please refer to the Multum Web site.

When looking at trends over time for therapeutic subclass and sub therapeutic subclasses, it is important to keep in mind many factors can play a role. These factors include: 1) drugs are reclassified due to changes in the Multum therapeutic classification scheme, 2) new drugs become available over time, and 3) generic versions of previously brand name only drugs become available.

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 (AHRQ) and the National Center for Health Statistics.

MEPS expenditure data are derived from both the Medical Provider Component (MPC) and Household Component (HC). MPC data are generally used for hospital-based events (e.g., inpatient stays, emergency room visits, and outpatient department visits), prescribed medicine purchases, and home health agency care. Office based physician care estimates use a mix of HC and MPC data while estimates for non-physician office visits, dental and vision services, other medical equipment and services, and independent provider home health care services are based on HC provided data. Details on the estimation process can be found in Machlin, S. R. and Dougherty, D. D. *Overview of Methodology for Imputing Missing Expenditure Data in the Medical Expenditure Panel Survey*. Methodology Report No. 19. March 2007. Agency for Healthcare Research and Quality, Rockville, MD. http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr19/mr19.pdf.

For more information about MEPS, call the MEPS information coordinator at AHRQ (301-427-1406) or visit the [MEPS Web site at http://www.meps.ahrq.gov/](http://www.meps.ahrq.gov/).

References

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 Healthcare Policy and Research, 1997. http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr1/mr1.pdf

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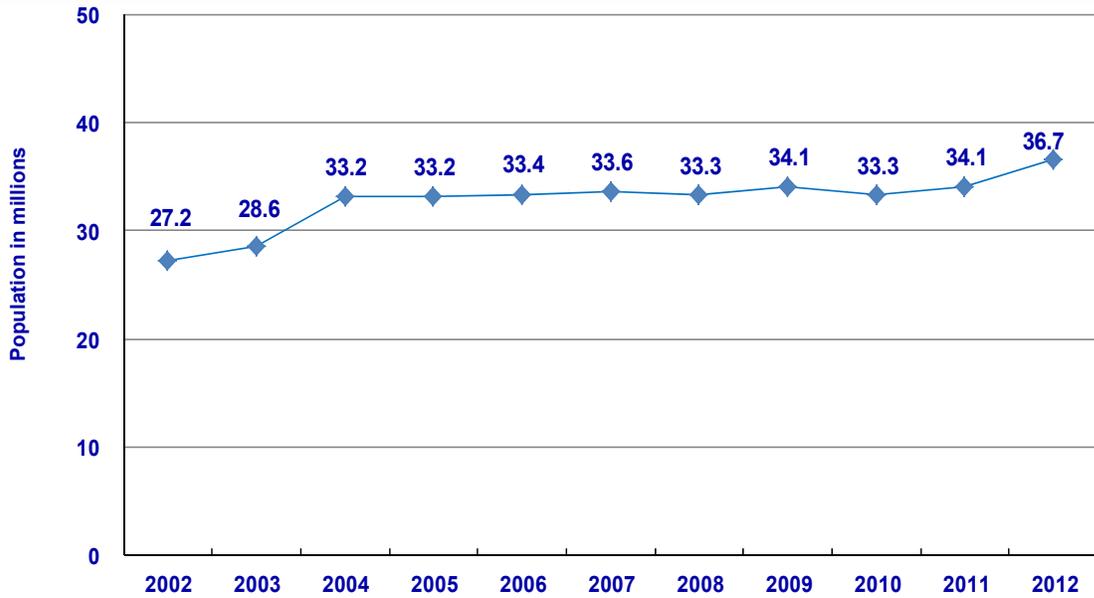
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AHRQ welcomes questions and comments from readers of this publication who are interested in obtaining more information about access, cost, use, financing, and quality of health care in the United States. We also invite you to tell us how you are using 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
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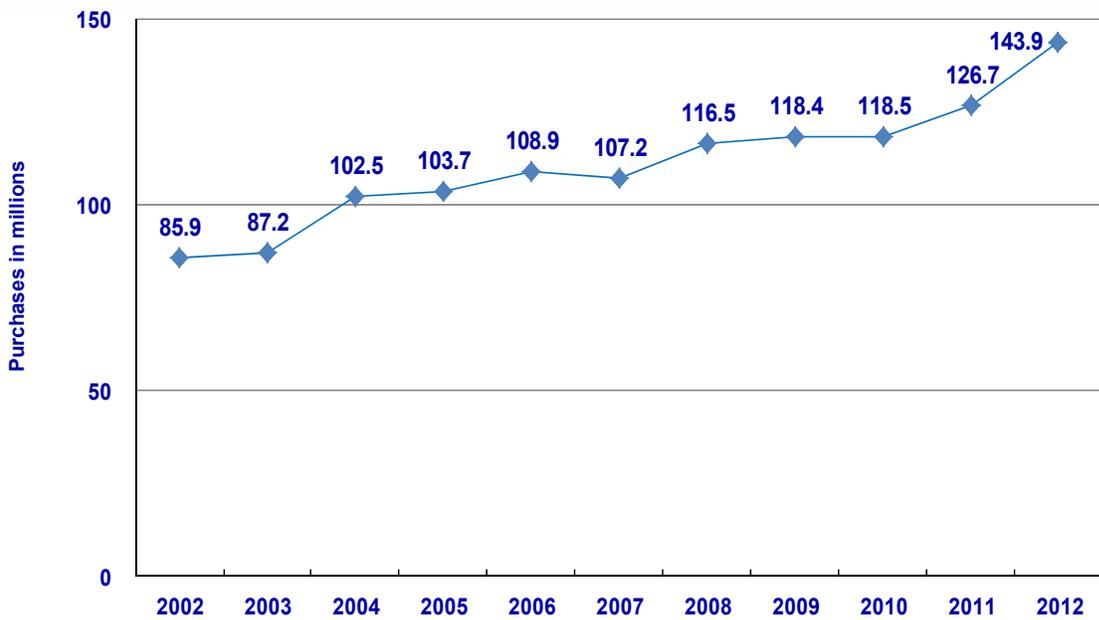
Figure 1. Total number of people purchasing one or more outpatient prescribed opioids, 2002 through 2012



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2002 through 2012



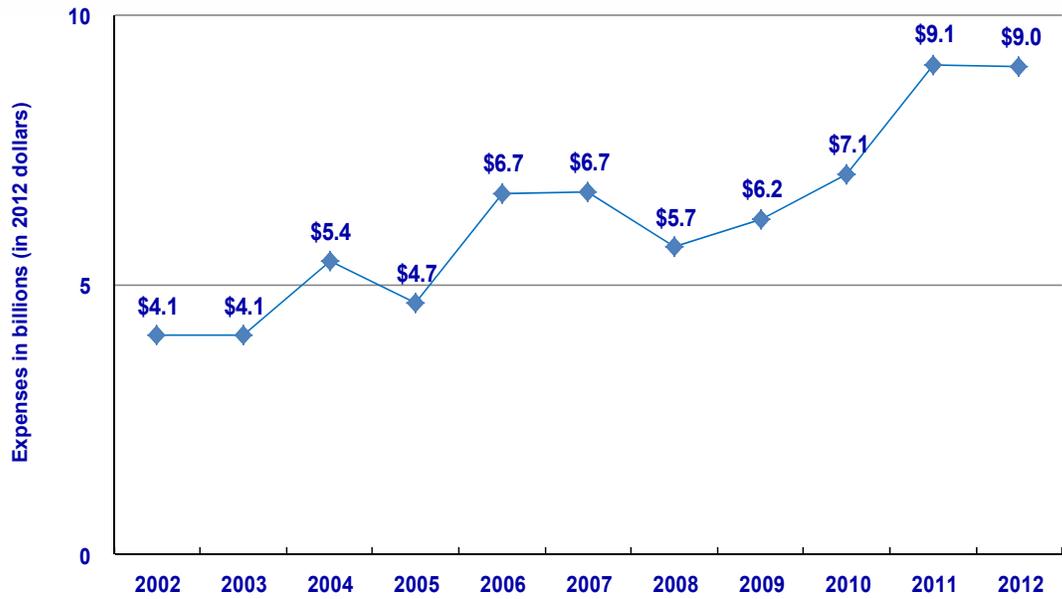
Figure 2. Total outpatient prescribed opioids purchases, 2002 through 2012



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2002 through 2012



Figure 3. Total expenses for outpatient prescribed opioids, 2002 through 2012



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2002 through 2012



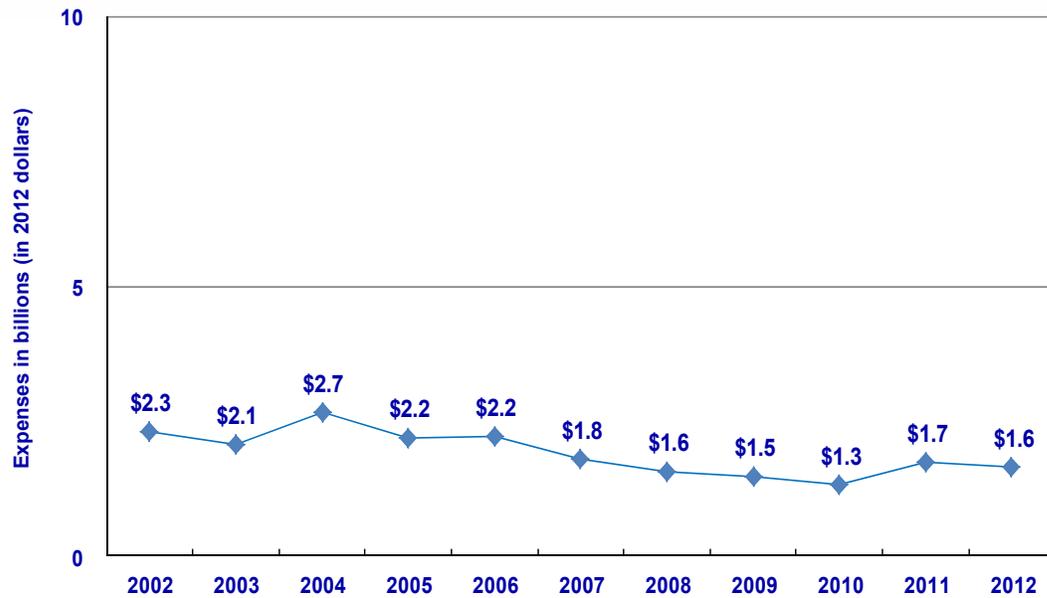
Figure 4. Mean annual expense for outpatient prescribed opioids, 2002 through 2012



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2002 through 2012



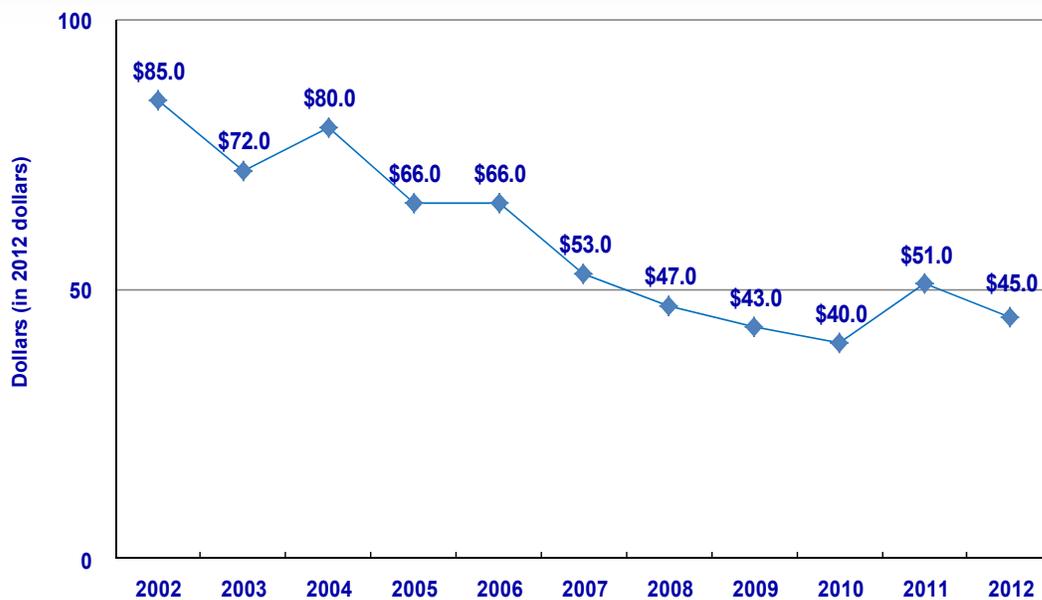
Figure 5. Total out of pocket expenses for outpatient prescribed opioids, 2002 through 2012



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2002 through 2012



Figure 6. Mean out of pocket expense for outpatient prescribed opioids, 2002 through 2012



Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2002 through 2012