November 2017

Total Expenses, Total Utilization, and Sources of Payment for Outpatient Prescription Opioids in the U.S. Adult Civilian Noninstitutionalized Population, 2015

Marie N. Stagnitti, MPA

Introduction

Prescription drugs are essential to improving the quality of life for millions of Americans living with acute or chronic pain. However, misuse, abuse, addiction, and overdose of these products, especially opioids, have become serious public health problems in the United States.1 Examining use and expenses for prescribed opioids can help inform the efforts to address these problems.

This Statistical Brief presents Medical Expenditure Panel Survey (MEPS) Household Component (HC) estimates of total expenses, total purchases and sources of payment for all opioids, as well as the top four opioid products ranked by total expenses in 2015, which are: Hydrocodone, Oxycodone, Tramadol, and Codeine.

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

Because of methodological and definitional differences, readers should use caution when comparing MEPS data with data from other sources. Details on the MEPS methodology and differences with other sources are included in the Definitions section of this Statistical Brief.

Findings

In 2015, there was an estimated total of $10.7 billion paid for outpatient prescription opioids by the adult U.S. civilian noninstitutionalized population (figure 1); 41.6 million adults or 16.8 percent of the 247.2 million adults in the U.S civilian noninstitutionalized population purchased one or more outpatient prescription opioids in 2015 (data not shown). The top four opioid products ranked by total expenses were the following: Hydrocodone ($5.0 billion), Oxycodone ($2.8 billion), Tramadol ($0.6 billion) and Codeine ($0.2 billion).

During 2015, there was an estimated total of 152.8 million opioid outpatient prescription purchases for adults in the U.S. civilian noninstitutionalized population (figure 2). The top four products ranked by total purchases in 2015 were the following: Hydrocodone (61.7 million prescriptions), Oxycodone (33.0 million prescriptions), Tramadol (26.5 million prescriptions) and Codeine (13.1 million prescriptions).

Total outpatient prescription opioid expenses for adults in 2015 were largely financed by third-party payers (figure 3). In 2015, private insurance/TRICARE paid 29.6 percent of total opioid expenses, Medicare paid 33.2 percent, individuals and family members paid 19.3 percent, Medicaid/CHIP paid 11.0 percent and other sources paid 6.9 percent. Comparing the distribution of spending by source of payment for all outpatient prescription medicines and all outpatient prescription opioids for adults, a higher proportion was paid out-of-pocket for opioids (19.3 percent) than all prescription drugs (13.3 percent).

Comparing the distribution of spending by source of payment for the top four opioid products individually, Hydrocodone had the highest proportion of total expenses paid by private insurance/TRICARE and Medicare (35.8 percent and 28.4 percent, respectively) followed by individual and family out-of-pocket payments (18.8 percent), Medicaid (10.4 percent), and other sources (6.5 percent) (figure 4). Oxycodone had the highest proportion of total expenses paid by Medicare (44.4 percent) and the lowest proportions paid by Medicaid (8.4 percent) and other sources (6.1 percent). Tramadol had about a quarter of total expenses paid by the following sources: private insurance/TRICARE (23.1 percent), Medicare (29.1 percent) and out-of-pocket payments by individuals and family members (28.3 percent), while Medicaid (10.1 percent) and other sources (9.5 percent) each paid about 10 percent. Finally, individual and self and family out-of-pocket payments and Medicaid sources totaled nearly 80 percent of total expenses for Codeine (43.4 percent 35.5 percent, respectively) while private insurance/TRICARE, Medicare, and other sources combined paid about twenty percent of total expenses (8.3 percent, 8.1 percent and 4.8 percent).

In 2015, for adults, the average annual total and out-of-pocket expense per fill for outpatient prescription opioids was $70 and $13, respectively (figure 5). Examining the top four opioid products, Hydrocodone and Oxycodone products had higher average total ($81 and $84, respectively) and out-of-pocket expenses ($15 and $16, respectively) per fill than Tramadol ($24, $7) and Codeine ($18, $8).

During 2015, the average annual and out-of-pocket expense per person for all outpatient prescriptions among adults with one or more prescription drug opioid purchase during the year was $3,391 and $404, respectively (figure 6). Examining the top four opioid products, among adults with one or more purchases of the top four opioid products, Hydrocodone, Oxycodone, and Tramadol, had higher average out-of-pocket expenses for all outpatient prescriptions per person ($400, $495, and $513, respectively) than Codeine ($262).

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.

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:


Suggested Citation


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:

Joel Cohen, PhD, Director
Center for Financing, Access, and Cost Trends
Agency for Healthcare Research and Quality
5600 Fishers Lane
Rockville, MD 20857
Figure 1. Total expenses for all outpatient prescription opioids and the top four opioid products*, U.S. civilian noninstitutionalized adult population, 2015

*Ranked by total expenses in 2015

Note: Estimates are for the U.S. civilian noninstitutionalized population.
Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2015

Figure 2. Total outpatient prescription opioid purchases for all opioids and the top four opioid products*, U.S. civilian noninstitutionalized adult population, 2015

*Ranked by total purchases in 2015

Note: Estimates are for the U.S. civilian noninstitutionalized population.
Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2015

Statistical Brief #505: Total Expenses, Total Utilization, and Sources of Payment for Outpatient Prescription Opioids in the U.S. Adult Civilian Noninstitutionalized Population, 2015
Figure 3. Distribution of spending by source of payment for all outpatient prescription medicines and all outpatient prescription opioids, U.S. civilian noninstitutionalized adult population, 2015

Note: Estimates are for the U.S. civilian noninstitutionalized population. Percentages may not add to exactly 100.0 due to rounding.
Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2015

Figure 4. Distribution of spending by source of payment for the top four opioid products*, U.S. civilian noninstitutionalized adult population, 2015

*Ranked by total expenses in 2015
Note: Estimates are for the U.S. civilian noninstitutionalized population. Percentages may not add to exactly 100.0 due to rounding.
Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2015
Figure 5. Average annual total and out-of-pocket expense per fill for all outpatient prescription opioids and the top four opioid products*, U.S. civilian noninstitutionalized adult population, 2015

*Ranked by total expenses in 2015

Note: Estimates are for the U.S. civilian noninstitutionalized population.
Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2015

Figure 6. Average annual and out-of-pocket expense per person for all outpatient prescriptions among adults with one or more prescription drug opioid purchase and with one or more purchase of the top four opioid products*, U.S. civilian noninstitutionalized adult population, 2015

*Ranked by total expenses in 2015

Note: Estimates are for the U.S. civilian noninstitutionalized population.
Source: Center for Financing, Access, and Cost Trends, AHRQ, Household Component of the Medical Expenditure Panel Survey, 2015

Statistical Brief #505: Total Expenses, Total Utilization, and Sources of Payment for Outpatient Prescription Opioids in the U.S. Adult Civilian Noninstitutionalized Population, 2015