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Average Expenditures per Prescription Antidepressant Fill in the U.S. Civilian Noninstitutionalized Population by Select Sociodemographic Characteristics, 2013 and 2018

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Highlights

- Among youth under age 18, the average out-of-pocket expenditure per prescription antidepressant fill decreased from $10 in 2013 to $4 in 2018. A decrease in average out-of-pocket expenditures per fill was also observed for adults aged 18 to 64, from $15 to $9.

- Among those living in poor/near-poor/low-income households, the average total expenditure per prescription antidepressant fill decreased from $73 in 2013 to $49 in 2018, the average out-of-pocket expenditure per fill decreased from $10 to $5, and the average third-party expenditure per fill decreased from $63 to $43.

- Between 2013 and 2018, the average out-of-pocket expenditure per prescription antidepressant fill decreased for both males ($13 to $9) and females ($14 to $9).

- Between 2013 and 2018, the average total expenditure per prescription antidepressant fill and the average third-party expenditure per fill both decreased among those with only public health insurance coverage ($80 to $55 and $74 to $50, respectively).

Introduction

Prescription antidepressants are widely prescribed to treat a variety of mental health concerns, including major depressive disorder. In 2018, an estimated 11.8 percent of elderly adults aged 65 or older experienced any mental illness in the past year. Between 2013 and 2018, the percentage of middle- or high-income adults experiencing any mental illness in the past year increased from 16.0 percent to 17.2 percent. During the same period, the percentage of youths aged 12 to 17 that experienced at least one major depressive episode in the past year increased from 10.7 percent to 14.4 percent, and the percentage of adults experiencing at least one past-year major depressive episode increased from 6.7 percent to 7.2 percent. The percentage of Black non-Hispanic adults experiencing at least one major depressive episode in the past year increased from 4.6 percent in 2013 to 6.1 percent in 2018. Among adult females, both the percentage experiencing at least one major depressive episode in the past year and the percentage experiencing serious mental illness in the past year increased from 2013 to 2018 (8.1 percent to 9.0 percent and 4.9 percent to 5.7 percent, respectively).[1]

Between 2013 and 2018, the average total expenditure per fill for antidepressants remained stable, at $76 in 2013 and $72 in 2018, the average out-of-pocket expenditure per fill decreased from $14 to $9, and the average third-party payer expenditure remained stable at $62 in 2013 and $63 in 2018.[2] To ensure fair and equitable policy as more people use prescription antidepressants, it is important for policymakers and researchers to understand changes in expenditures for subpopulations using these medications. This Statistical Brief presents a comparison of expenditures for prescription antidepressants in the U.S. civilian noninstitutionalized population purchasing one or more antidepressant prescriptions by select sociodemographic characteristics between 2013 and 2018.

Averages per fill are presented for total expenditures, out-of-pocket expenditures, and third-party expenditures for individuals purchasing at

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[1] Substance Abuse and Mental Health Services Administration (SAMHSA). *Results from the 2018 National Survey on Drug Use and Health: Detailed Tables*. 2019. SAMHSA, Center for Behavioral Health Statistics and Quality, Rockville, MD. https://www.samhsa.gov/data/report/2018-nsduh-detailed-tables

[2] Ahrnsbrak, R., and Stagnitti, M. N. *Comparison of Antidepressant and Antipsychotic Utilization and Expenditures in the U.S. Civilian Noninstitutionalized Population, 2013 and 2018.* Statistical Brief #534. December 2020. Agency for Healthcare Research and Quality, Rockville, MD. https://www.meps.ahrq.gov/data_files/publications/st534/stat534.pdf

least one prescription antidepressant in the year. Estimates are based on the 2013 Medical Expenditure Panel Survey-Household Component (MEPS-HC) and the 2018 MEPS-HC.

Only prescriptions obtained in an outpatient setting (retail and mail-order prescribed medicines) are included in these estimates. Prescription medicines administered in an inpatient setting or in a clinic or physician's office are excluded. No standardization for days supplied was made; for example, the estimates presented do not differentiate between a 30-day supply and a 90-day supply. Expenditure estimates are presented in real dollars; estimates for 2013 are inflated to 2018 dollars based on the gross domestic product (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 unless otherwise noted.

Findings

Age (figure 1)

Between 2013 and 2018, the average out-of-pocket expenditure per prescription antidepressant fill decreased for both youth under age 18 ($10 to $4) and for adults age 18 to 64 ($15 to $9) (figure 1).

Race and Ethnicity (figure 2)

Between 2013 and 2018, the only significant change in expenditures observed for prescription antidepressant fills among race and ethnicity groups was the average out-of-pocket expenditure per fill among persons who are non-Hispanic White, which decreased from $15 to $9 (figure 2).

Sex (figure 3)

Both males and females saw declines in the average out-of-pocket expenditure per prescription antidepressant fill between 2013 and 2018 ($13 to $9 and $14 to $9, respectively) (figure 3).

Poverty Status (figure 4)

For individuals living in poor/near-poor/low-income households, the average total expenditure per prescription antidepressant fill decreased from $73 in 2013 to $49 in 2018, the average out-of-pocket expenditure per fill decreased from $10 to $5, and the average third-party expenditure per fill decreased from $63 to $43 (figure 4). Among those living in middle- to high-income households, a significant difference was observed only for the average out-of-pocket expenditure, which decreased from $17 in 2013 to $11 in 2018.

Health Insurance (figure 5)

Among individuals with only public health insurance, the average total expenditure per prescription antidepressant fill fell from $80 in 2013 to $55 in 2018 (figure 5). The average third-party expenditure also fell for individuals with only public health insurance during the same period, from $74 to $50. For individuals with any private health insurance, a decrease was observed in the average out-of-pocket expenditure per prescription antidepressant fill, from $17 in 2013 to $11 in 2018.

Data Sources

The estimates reported in this Brief are based on data from the following Medical Expenditure Panel Survey (MEPS) data files:

- 2013 Prescribed Medicines Data File (HC-160A)
- 2013 Full-Year Consolidated Data File (HC-163)
- 2018 Prescribed Medicines Data File (HC-206A)
- 2018 Full-Year Consolidated Data File (HC-209)

The Prescribed Medicines files used for this analysis are confidential internal versions (available to outside researchers through the Agency for Healthcare Research and Quality Data Center). MEPS public use files are downloadable from https://meps.ahrq.gov/data_stats/download_data_files.jsp.

Definitions

Expenditures
Expenditures include the total direct payments from all sources to pharmacies for prescriptions reported by respondents in the MEPS-HC. Expenditures are in real dollars; estimates for 2013 are inflated to 2018 dollars based on the GDP price index. Refills as well as original prescriptions are included in expenditure estimates. Manufacturer rebates to payers and pharmacy benefit companies were not measured and were not subtracted from total direct payments.

Sources of payment
- **Out-of-pocket:** This category comprises payments by the person or other family members.
- **Third-party payer:** This category includes payments by Medicare, Medicaid, private insurance, the U.S. Department of Veterans Affairs, the Civilian Health and Medical Program of the Department of Veterans Affairs (CHAMPVA), TRICARE, other federal sources, other state and local sources, workers' compensation, and other unclassified sources.

Age
Age is the last available age for the sampled person. For most persons, this was their age at the end of the year.

Racial and ethnic classifications
Classification by race/ethnicity was based on information reported for each family member. Respondents were asked if each family member's race was best described as White, Black or African American, American Indian or Alaska Native, Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese, Other Asian, Native Hawaiian, Guamanian or Chamorro, Samoan, Other Pacific Islander, or some other race. They also were asked if each family member was Hispanic, Latino, or of Spanish origin. All persons who were reported to be Hispanic were classified as such regardless of their race(s). Since the Hispanic grouping can include multiple races, the race categories of non-Hispanic Black only, non-Hispanic White only, and other do not include Hispanics. MEPS respondents who reported other single or multiple races and were non-Hispanic were included in the other category.

Poverty status
Income was classified based on the percentage of the federal poverty level for total family income, adjusted for family size and composition. A two-category income variable was used for this Statistical Brief: poor/near-poor/low-income (less than 200 percent of the federal poverty level) and middle-income/high-income (200 percent and greater of the federal poverty level).

Health insurance
Health insurance was defined as any private if the sampled person was reported to have any private health insurance coverage at any point during the year of interest regardless of whether he or she also had other types of health insurance. Public only was assigned if the only source(s) of health insurance coverage reported for a sampled member during the year of interest were public sources. Public sources include Medicare, TRICARE/CHAMPVA, Medicaid, the State Children's Health Insurance Program (SCHIP), and other public hospital/physician coverage. The Indian Health Service is not included as a public source of coverage in this classification. Uninsured refers to sample members who had no reported form of health insurance coverage for the entire year of interest.

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

antidepressants in 2013 and 2018—therapeutic class: psychotherapeutic agents; subclass: antidepressants.

A prescribed medicine can be assigned multiple therapeutic classes and subclasses. The estimates presented in this Brief include all prescribed medicines assigned to the therapeutic subclass of antidepressant, regardless of whether that prescribed medicine has other possible therapeutic class or subclass assignments. For example, bupropion is included in estimates of antidepressants despite also being assigned to the Multum therapeutic class of miscellaneous agents and therapeutic subclass of smoking cessation aids. When looking at estimates over time for therapeutic subclass and sub-subclasses, it is important to keep this in mind. For additional information on these and other Multum Lexicon variables, please refer to the Multum website.

About MEPS

The Medical Expenditure Panel Survey Household Component (MEPS-HC) collects nationally representative data on healthcare use, expenditures, sources of payment, and insurance coverage for the U.S. civilian noninstitutionalized population. The MEPS-HC is cosponsored by the Agency for Healthcare Research and Quality (AHRQ) and the National Center for Health Statistics (NCHS). More information about the MEPS-HC can be found on the MEPS website 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:

Agency for Healthcare Research and Quality. *Using Appropriate Price Indices for Analyses of Health Care Expenditures or Income across Multiple Years*. 2018. Agency for Healthcare Research and Quality, Rockville, MD. http://www.meps.ahrq.gov/mepsweb/about_meps/Price_Index.shtml

Ahrnsbrak, R., and Stagnitti, M. N. *Comparison of Antidepressant and Antipsychotic Utilization and Expenditures in the U.S. Civilian Noninstitutionalized Population, 2013 and 2018*. Statistical Brief #534. December 2020. Agency for Healthcare Research and Quality, Rockville, MD. https://www.meps.ahrq.gov/data_files/publications/st534/stat534.pdf

Cohen, J. *Design and Methods of the Medical Expenditure Panel Survey Household Component*. MEPS Methodology Report No. 1. AHCPR Pub. No. 97-0026. 1997. Agency for Health Care Policy and Research (AHCPR),

Rockville, MD.
http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr1/mr1.shtml

Cohen, S. Design Strategies and Innovations in the Medical Expenditure Panel Survey. *Medical Care*, 41(7) Supplement: III-5–III-12. July 2003.

Ezzati-Rice, T. M., Rohde, F., and Greenblatt, J. *Sample Design of the Medical Expenditure Panel Survey Household Component, 1998–2007*. Methodology Report #22. March 2008. Agency for Healthcare Research and Quality, Rockville, MD.
http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr22/mr22.shtml

Hill, S. C., Roemer, M., and Stagnitti, M. N. *Outpatient Prescription Drugs: Data Collection and Editing in the 2011 Medical Expenditure Panel Survey*. Methodology Report #29. March 2014. Agency for Healthcare Research and Quality, Rockville, MD.
http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr29/mr29.shtml

Hill, S. C., Zuvekas, S. H., and Zodet, M. W. The Validity of Reported Medicare Part D Enrollment in the Medical Expenditure Panel Survey. *Medical Research and Review*, 69(6):737–750. December 2012.

Stagnitti, M. N., Beauregard, K., and Solis, A. *Design, Methods, and Field Results of the Medical Expenditure Panel Survey Medical Provider Component (MEPS MPC)—2006 Calendar Year Data*. Methodology Report #23. November 2008. Agency for Healthcare Research and Quality, Rockville, MD.
http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr23/mr23.shtml

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Ahrnsbrak, R., and Stagnitti, M. N. *Average Expenditures per Prescription Antidepressant Fill in the U.S. Civilian Noninstitutionalized Population by Select Sociodemographic Characteristics, 2013 and 2018.* Statistical Brief #538. November 2021. Agency for Healthcare Research and Quality, Rockville, MD.
https://meps.ahrq.gov/data_files/publications/st538/stat538.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 healthcare 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 W. Cohen, PhD, Director

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Figure 1. Average total, out-of-pocket, and third-party payer expense per fill for antidepressants, by age, 2013 & 2018
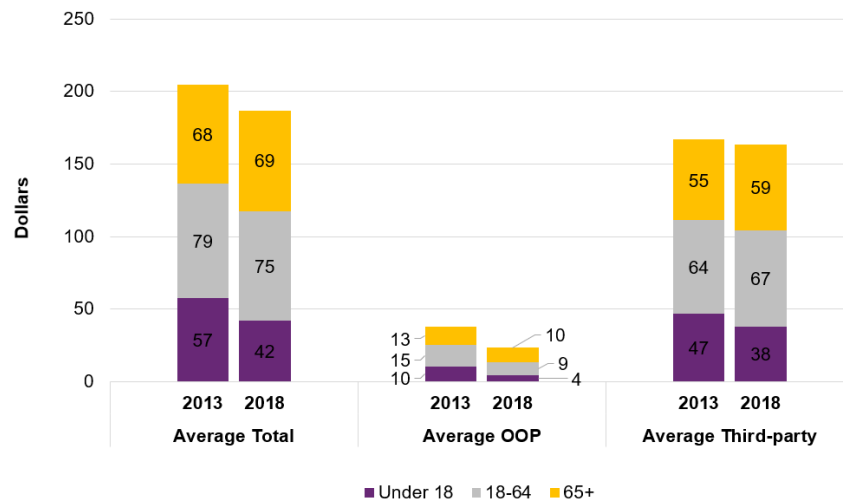
Source: Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends, Medical Expenditure Panel Survey, Household Component, 2013 and 2018.
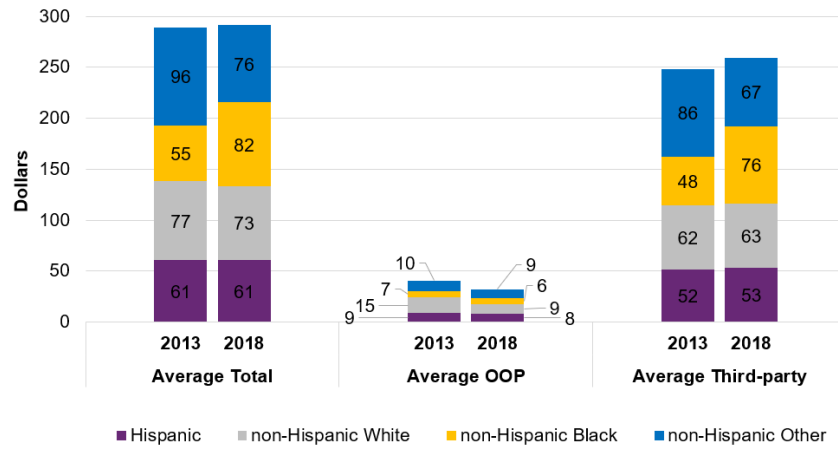
Figure 1. Average total, out-of-pocket, and third-party payer expense per fill for antidepressants, by age, 2013 & 2018

Age	Average Total, 2013 ($)	Average Total, 2018 ($)	Average OOP*, 2013 ($)	Average OOP*, 2018 ($)	Average Third-party, 2013 ($)	Average Third-party, 2018 ($)
Under 18	57.4	42.1	10.4	4.2	47.0	37.9
18-64	79.1	75.5	14.7	8.9	64.5	66.5
65+	68.2	69.3	13.0	10.3	55.2	59.0

*Abbreviation for out-of-pocket expense.

Source: Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends, Medical Expenditure Panel Survey, Household Component, 2013 and 2018.

Figure 2. Average total, out-of-pocket, and third-party payer expense per fill for antidepressants, by race/ethnicity, 2013 & 2018

Source: Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends, Medical Expenditure Panel Survey, Household Component, 2013 and 2018.
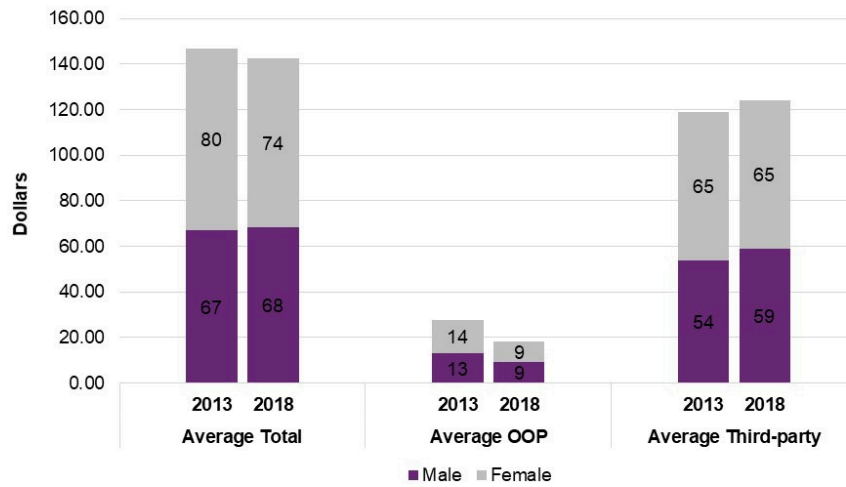
Figure 2. Average total, out-of-pocket, and third-party payer expense per fill for antidepressants, by race/ethnicity, 2013 & 2018

Race/ Ethnicity	Average Total, 2013 ($)	Average Total, 2018 ($)	Average OOP*, 2013 ($)	Average OOP*, 2018 ($)	Average Third-party, 2013 ($)	Average Third-party, 2018 ($)
Hispanic	60.7	60.6	8.8	7.8	51.9	52.8
non-Hispanic White	77.5	72.6	15.2	9.4	62.3	63.3
non-Hispanic Black	54.7	82.1	6.6	6.0	48.1	76.2
non-Hispanic Other	96.2	76.2	10.1	9.1	86.1	67.1

*Abbreviation for out-of-pocket expense.

Source: Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends, Medical Expenditure Panel Survey, Household Component, 2013 and 2018.

Source: Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends, Medical Expenditure Panel Survey, Household Component, 2013 and 2018.
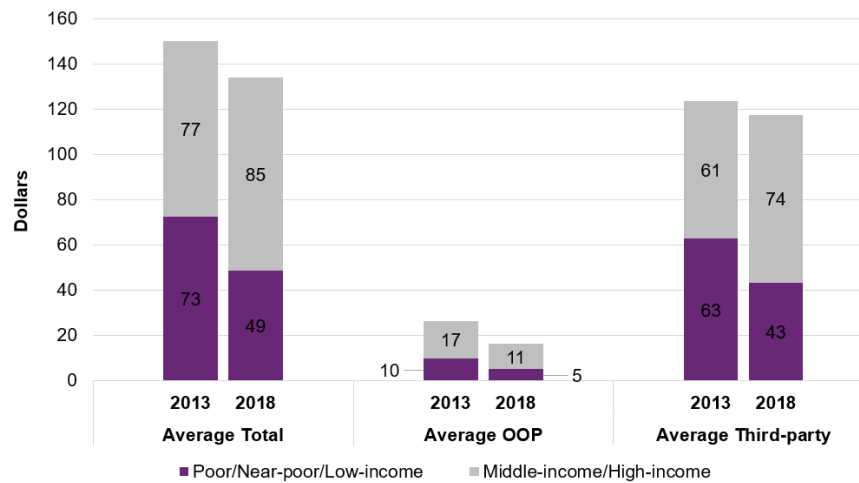
Figure 3. Average total, out-of-pocket, and third-party payer expense per fill for antidepressants, by sex, 2013 & 2018

Sex	Average Total, 2013 ($)	Average Total, 2018 ($)	Average OOP*, 2013 ($)	Average OOP*, 2018 ($)	Average Third-party, 2013 ($)	Average Third-party, 2018 ($)
Male	67.1	68.5	13.2	9.5	53.9	59.0
Female	79.6	74.1	14.5	8.9	65.1	65.3

*Abbreviation for out-of-pocket expense.

Source: Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends, Medical Expenditure Panel Survey, Household Component, 2013 and 2018.

Figure 4. Average total, out-of-pocket, and third-party payer expense per fill for antidepressants, by poverty status, 2013 & 2018

Source: Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends, Medical Expenditure Panel Survey, Household Component, 2013 and 2018.
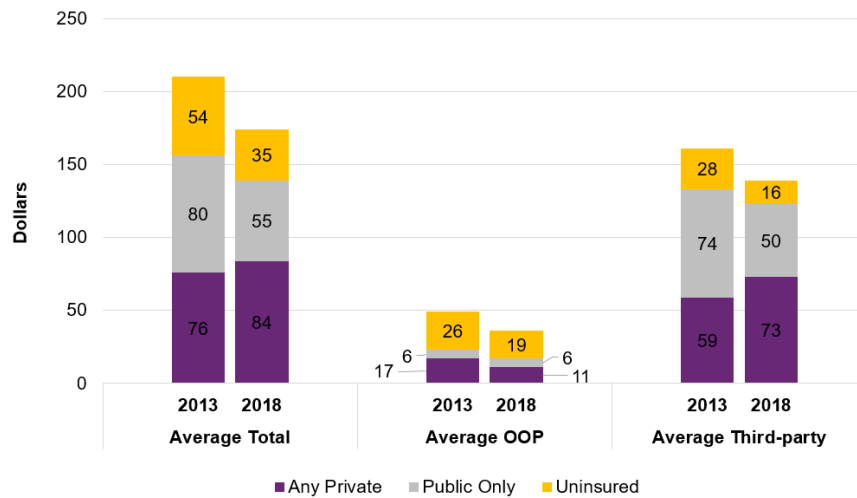
Figure 4. Average total, out-of-pocket, and third-party payer expense per fill for antidepressants, by poverty status, 2013 & 2018

Poverty Status	Average Total, 2013 ($)	Average Total, 2018 ($)	Average OOP*, 2013 ($)	Average OOP*, 2018 ($)	Average Third-party, 2013 ($)	Average Third-party, 2018 ($)
Poor/Near-poor/Low-income	72.7	48.6	9.7	5.1	62.9	43.5
Middle-income/High-income	77.4	85.4	16.8	11.2	60.6	74.2

*Abbreviation for out-of-pocket expense.

Source: Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends, Medical Expenditure Panel Survey, Household Component, 2013 and 2018.

Source: Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends, Medical Expenditure Panel Survey, Household Component, 2013 and 2018.

Figure 5. Average total, out-of-pocket, and third-party payer expense per fill for antidepressants, by health insurance, 2013 & 2018

Health Insurance	Average Total, 2013 ($)	Average Total, 2018 ($)	Average OOP*, 2013 ($)	Average OOP*, 2018 ($)	Average Third-party, 2013 ($)	Average Third-party, 2018 ($)
Any Private	76.0	84.0	17.0	11.0	59.0	73.0
Public Only	80.0	55.0	6.0	6.0	74.0	50.0
Uninsured	54.0	35.0	26.0	19.0	28.0	16.0

*Abbreviation for out-of-pocket expense.

Source: Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends, Medical Expenditure Panel Survey, Household Component, 2013 and 2018.