MEPS

Research Findings #43

Average Annual Opioid Use among Adults Treated for Conditions Associated with Chronic Pain versus Other Conditions, 2013–2015

AHRQ Advancing Excellence in Health Care

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Abstract

Based on pooled data for 2013-2015 from the Household Component of the Medical Expenditure Panel Survey (MEPS-HC), this Research Findings report examines the extent of opioid use among adults in the civilian noninstitutionalized population by selected medical condition groupings. In particular, persons treated for conditions associated with chronic pain are compared to persons treated for other types of conditions. The results provide baseline data that can help inform patients, providers, and policymakers as they continue to monitor the effects of the opioid crisis and the impacts of efforts to address it.

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The estimates in this report are based on the most recent data available at the time the report was written. However, selected elements of MEPS data may be revised on the basis of additional analyses, which could result in slightly different estimates from those shown here. Please check the MEPS website for the most current file releases.

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Average Annual Opioid Use among Adults Treated for Conditions Associated with Chronic Pain versus Other Conditions, 2013–2015

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Introduction

In recent years, inappropriate use of prescription opioids has become a national crisis. Prescription opioids play an important role in the management of chronic pain, but excessive dosages or extended use may lead to drug dependence, overdoses, and mortality. Moreover, increased prescribing of opioids has been associated with marked increases in these adverse outcomes (1). In response to this crisis, in 2016, the Centers for Disease Control and Prevention (CDC) released new prescribing guidelines intended to address the concern that high dosages and long-term use of opioids can lead to opioid use disorder and its adverse health outcomes (2). The release of these guidelines has been associated with accelerated rates of decline in the use of opioids for pain management. More recently, however, some patients and doctors have argued that the implementation of these guidelines has been too broad. In a recent article in the *New England Journal of Medicine*, the authors of the CDC guidelines acknowledged that doctors and others in the healthcare system have often wrongly implemented their recommendations, for example, by applying them to populations outside the scope of the guidelines or abruptly cutting off patients with chronic pain who had been receiving opioids (3).

This Research Findings report examines variation in opioid use among individuals treated for conditions associated with chronic pain during the 3-year period prior to release of the guidelines versus those not treated for those conditions but having some medical care for other chronic or non-chronic conditions during the same period. The results provide baseline data that can help inform patients, providers, and policymakers as they continue to monitor the effects of the opioid crisis and the impacts of efforts to address it.

In this report, we use pooled data for 2013–2015 from the Household Component of the Medical Expenditure Panel Survey (MEPS-HC) to examine the extent of opioid use among adults age 18 and older in the civilian noninstitutionalized population by selected medical condition groupings. More specifically, we compare sociodemographic characteristics as well as annual opioid use (defined as having at least one outpatient[1] prescription fill during the year) and levels of use (two different annual measures of number of fills) across three mutually exclusive groups of adults who had some medical treatment for at least one medical condition during the year.[2] These groups, in hierarchical order, include: 1) adults treated for conditions associated with chronic pain;[3] 2) adults treated for other chronic conditions; and 3) adults treated for non-chronic conditions only. Adults without any reported medical care during the year and

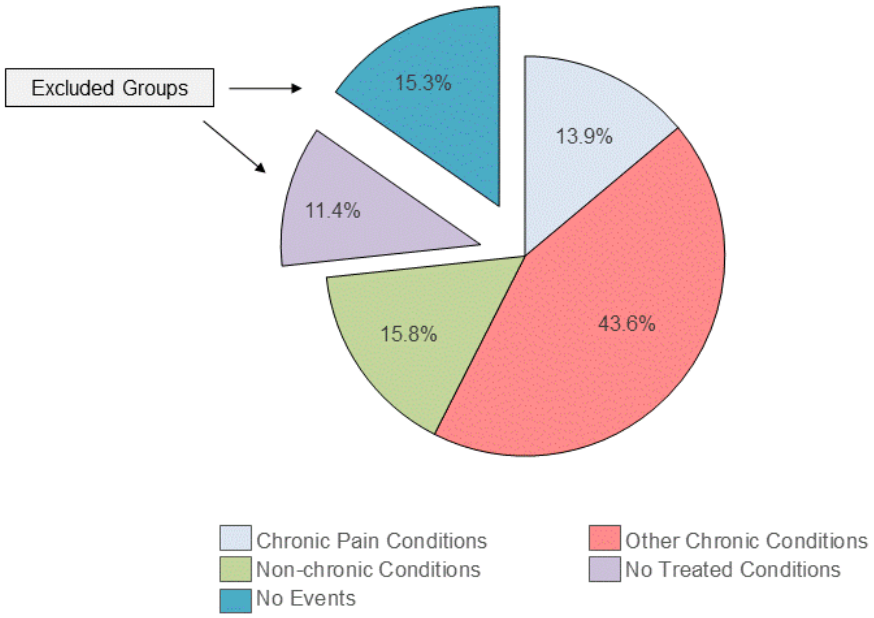
[1] MEPS does not collect information on prescriptions associated with inpatient stays.

[2] The MEPS event types for which associated condition information is collected include office-based medical visits, hospital outpatient department visits, visits to emergency departments, hospital inpatient stays, prescribed medicines fills, and home healthcare. Associated health condition information is not collected in MEPS for dental visits or other miscellaneous healthcare expenditures. For details on MEPS event level data see: https://meps.ahrq.gov/mepsweb/data_stats/download_data_files_results.jsp?cboDataYear=All&cboDataTypeY=2%2CHousehold+Event+File&buttonYearandDataType=Search&cboPufNumber=All

[3] The most common broad treated condition types were back problems (59%), osteoarthritis and other non-traumatic joint disorders (21%), and systemic lupus and connective tissues disorders (20%) among sample persons in this group.

those having events without any reported associated health conditions[4] are excluded from the opioid use data tables (Tables 2–4). These excluded groups comprise about 15 percent and 11 percent, respectively, of the average annual adult population (244.5 million persons) in 2013–2015 (Figure 1). Additional detail on the classification of MEPS sample adults into the condition categories is provided in the Definitions section of this report.

Figure 1. Distribution of Adult Population by Treated Condition Group, 2013-2015 (average annual)



Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey, Household Component, 2013–2015.

The three measures of opioid use presented in this report are: 1) percentage of adults with one or more outpatient prescribed opioid fills during the year; 2) percentage of adults with four or more outpatient opioid prescription fills during the year; and 3) average number of outpatient opioid prescription fills for those with at least one fill. The first measure reflects any opioid use while the second and third measures reflect degree of use. The estimates in this report are based on 3 years of pooled data (2013–2015) and thus reflect "average annual" measures for the period. In addition to comparing overall estimates for these three measures across the condition subgroups, we examine differences by age, sex, race/ethnicity, education, employment, poverty status, insurance status, perceived health status, MSA status, and Census region. Only differences between estimates that are statistically significant at the 0.05 level are noted in the text.

[4] About 56 percent of these sample persons had only office-based visits for non-condition-related services such as general check-ups, immunizations, or vision exams and 42 percent only had dental visits or other medical expense types for which associated conditions are not collected in MEPS. Moreover, only 1.8 percent of these persons had any opioid use.

Highlights

- On average, during the 3 years from 2013 to 2015, individuals treated for conditions associated with chronic pain comprised only about 14 percent of all adults but comprised more than one-third (36.2 percent) of adult opioid users and used about half (52.8 percent) of opioid prescription fills for adults.
- In all sociodemographic subgroups, adults treated for chronic pain conditions were substantially more likely to have had some opioid use than adults treated for other conditions.
- Among adults treated for conditions associated with chronic pain, the percentage with any opioid use was slightly higher among the elderly and those aged 45-64 than those aged 18-44. Conversely, among adults only treated for non-chronic conditions, the percentage with any opioid use was higher among the non-elderly than the elderly.
- Among adults treated for chronic pain conditions, Hispanics were less likely than black or white non-Hispanics to have any opioid use.
- Among non-elderly adults treated for chronic pain conditions, nearly two-thirds of those covered by public insurance had at least one opioid fill compared to only about one-third of those with private coverage or no insurance.
- Among the elderly treated for chronic pain conditions, just over half of those covered by both Medicare and other public insurance used opioids versus about two-fifths of those with Medicare and private insurance.

Findings

Sociodemographic characteristics by treated condition group

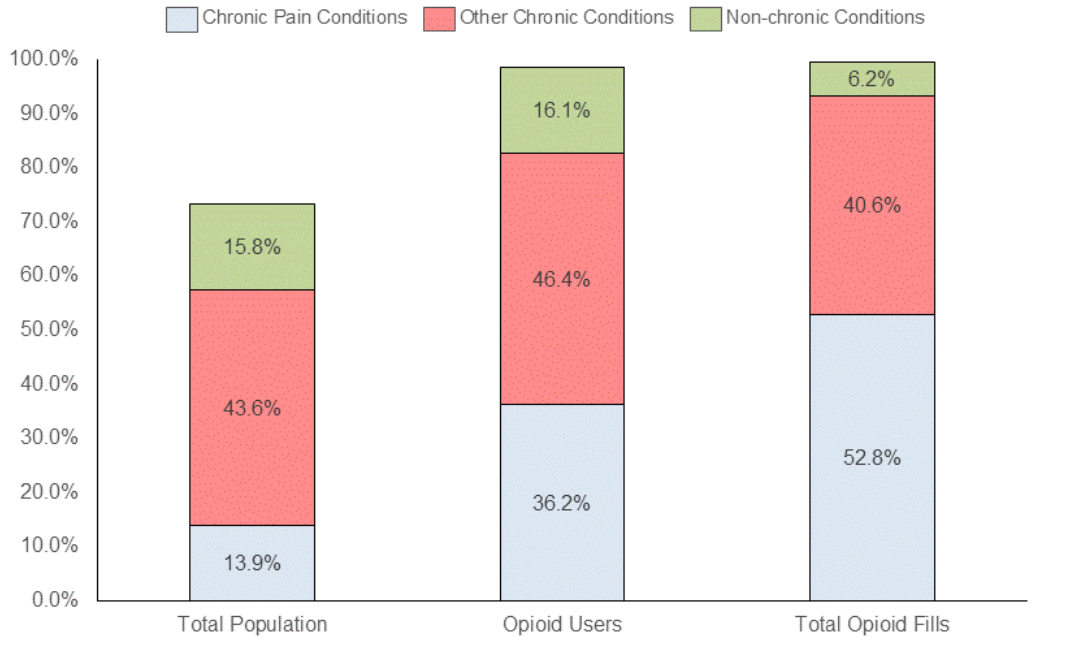
The demographic profile of adults treated for conditions associated with chronic pain was generally similar to that for adults treated for other chronic conditions (Table 1). However, those in the chronic pain conditions group were more likely to be reported in fair/poor health and slightly more likely to be female and, among the non-elderly, have public insurance.[5] Compared to the chronic pain conditions and other chronic conditions groups, adults in the non-chronic conditions group were much less likely to be elderly and more likely to be employed and in better health.

Overall variation in opioid use by treated condition group

Figure 2 shows that individuals treated for conditions associated with chronic pain comprised only 13.9 percent of all adults but over one-third of adult opioid users (36.2 percent) and over half of opioid prescription fills for adults (52.8 percent). Adults treated for other chronic conditions represented similar proportions of the population, opioid users, and opioid fills (41–46 percent). While adults that were only treated for non-chronic conditions comprised the same proportion of both the overall population and opioid users (about 16 percent), they accounted for a lower proportion (6.2 percent) of total opioid fills.

[5] In addition, the proportions of persons treated for some type of cancer (not shown in Table 1), which can be associated with pain, did not differ significantly between the chronic pain and other chronic conditions groups (11.7 and 10.7 percent, respectively).

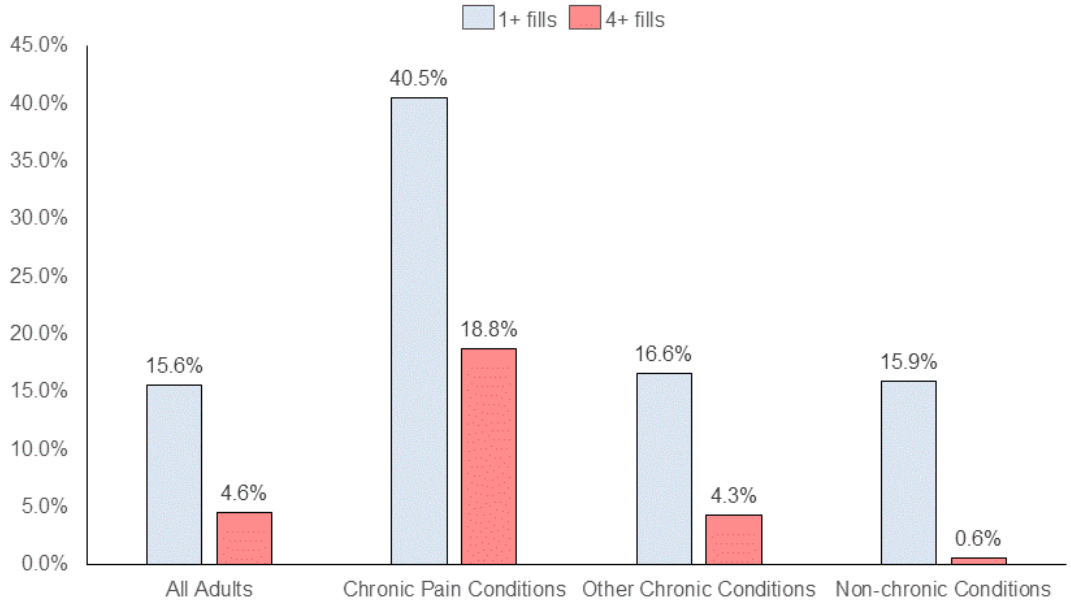
Figure 2. Distributions of Adult Population and Opioid Use by Treated Condition Group, 2013-2015 (average annual)



Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey, Household Component, 2013–2015.
Note: Percentages do not sum to 100 because adults without any specific conditions associated with any of their reported events and those with no reported events are not shown.

During 2013–2015, 15.6 percent of all adults had at least one outpatient opioid prescription fill and 4.6 percent had four or more fills, on average, per year (Figure 3). However, there was significant variation in opioid use across the treated condition groups. About two of every five adults (40.5 percent) treated for conditions associated with chronic pain had at least one opioid fill, which was more than twice that for the other groups (16.6 percent for other chronic and 15.9 percent for non-chronic groups). Moreover, nearly one-fifth (18.8 percent) of those treated for chronic pain conditions had at least four fills, on average, during the year versus only 4.3 percent of the other chronic group and 0.6 percent of the non-chronic group.

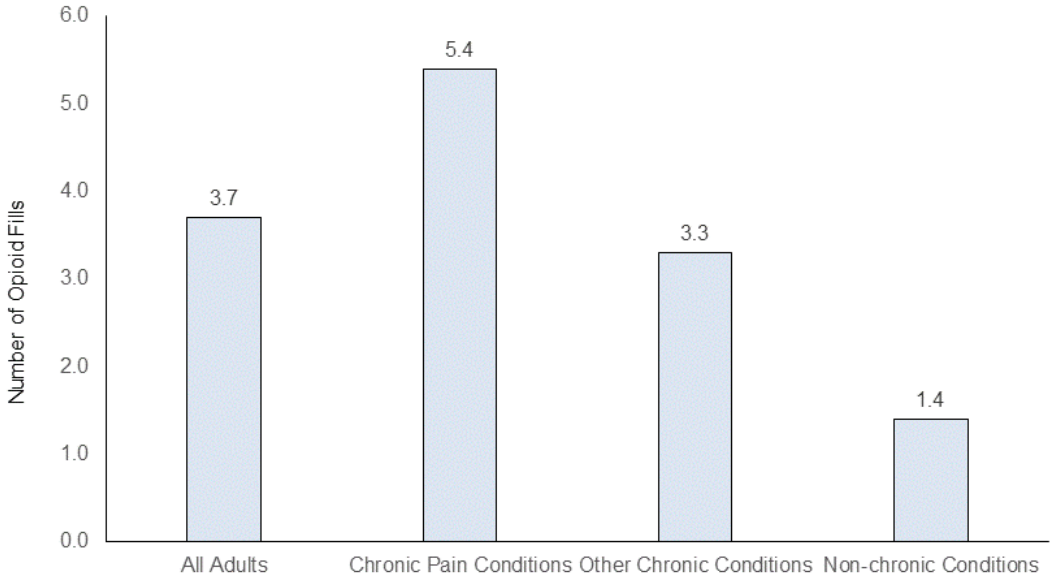
Figure 3. Average Annual Percent of Adults by Number of Opioid Fills and Treated Condition Group, 2013-2015



Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey, Household Component, 2013–2015.
Note: "All adults" includes those without any specific conditions associated with any of their reported events and those with no reported events.

Among adults with one or more opioid fills during 2013–2015, the average was 3.7 fills per person per year (Figure 4). This average ranged from 1.4 for those treated for only non-chronic conditions to 5.4 for those treated for chronic pain conditions.

Figure 4. Average Annual Number of Opioid Fills per Adult with at Least One Opioid Fill by Treated Condition Group, 2013-2015



Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey, Household Component, 2013–2015.
Note: "All adults" includes those without any specific conditions associated with any of their reported events and those with no reported events.

Variation in any opioid use by condition group and selected sociodemographic characteristics (Table 2)

Adults treated for chronic pain conditions were substantially more likely to have had some opioid use than those in the other two treated condition groups in all population subgroups shown in Table 2. Following are highlights of notable differences between demographic subgroups within the three treated condition groups.

- *Age:* Among adults in the chronic pain conditions group, the percentage with any opioid use was higher among the elderly and those aged 45-64 than those aged 18-44 (44.2 and 43.5 versus 32.1 percent, respectively). Conversely, among adults only treated for non-chronic conditions, the percentage with any opioid use was higher among those aged 18-44 and those aged 45-64 than the elderly (16.8 and 14.9 versus 7.3 percent, respectively).
- *Sex:* Overall, females were slightly more likely to have any opioid use than males (17.5 versus 13.6 percent). Among those with chronic pain conditions, however, there was no difference in the percentage with opioid use (about 40 percent regardless of gender).
- *Race/ethnicity:* Among adults treated for chronic pain, compared with white non-Hispanics (41.5 percent), the Hispanic and "Other" race/ethnic groups were less likely (about 32 percent each), and black non-Hispanics were more likely (47.0 percent), to have any opioid use.
- *Education:* In all condition groups, adults with some college were less likely than those with lower educational attainment to have any opioid use. For example, among those treated for

chronic pain, about 36 percent of those with some college had any opioid use versus 47–48 percent of those with a high school education or less.

- *Employment:* Among adults in the chronic pain conditions and other chronic condition groups, those who were not employed were more likely than employed persons to have any opioid use (51.3 versus 30.5 percent and 20.0 versus 13.7 percent for the two condition groups, respectively). In contrast, there was no significant difference in opioid use by employment status for the non-chronic condition group.
- *Poverty status:* In each condition group, middle/high income adults were less likely than adults in the lower income categories to have any opioid use. Among those treated for chronic pain conditions, about one-third of those with middle/high income (35.1 percent) had any opioid use compared with approximately half of low income and poor/near poor adults (49.6 and 55.6 percent, respectively).
- *Insurance status:*
  - *Ages 18–64*: Within each condition category, those with public insurance were more likely to have any opioid use than those with private insurance or no insurance. This differential is especially noteworthy for adults with chronic pain conditions, where 60.9 percent of those with public insurance used opioids compared with only about one-third of those with private coverage (33.3 percent) or no insurance (35.8 percent).
  - *Age 65 and older*: Among those treated for chronic pain conditions, over half with Medicare and other public insurance (53.5 percent) used opioids versus 41.2 percent of those with Medicare and private insurance. Among those treated for other chronic conditions, the elderly with Medicare and other public insurance were slightly more likely to have any opioid use (20.9 percent) than those with Medicare only (16.2 percent) or Medicare and private insurance (15.5 percent).
- *Health status:* Adults in fair or poor health were more likely to have any opioid use than adults in better health within each condition category (e.g., 62.4 versus 32.8 percent among adults with chronic pain). The health status differential in opioid use was smaller for the other groups (e.g., 25.2 versus 15.4 percent for the non-chronic group).
- *MSA status:* Among the chronic pain conditions and other chronic conditions groups, those not living in MSAs were slightly more likely than MSA residents to have any opioid use (45.5 versus 39.5 percent and 20.0 versus 15.9 percent for the two condition groups, respectively).
- *Region:* Among adults in the chronic pain conditions group, those living in the Northeast (32.6 percent) and West (35.6 percent) were less likely to have any opioid use than those living in the Midwest (43.5 percent) and South (46.3 percent).

Variation in level of opioid use measures by condition group and selected sociodemographic characteristics (Tables 3 and 4)

Table 3 shows the percentage of adults with four or more fills and Table 4 shows the average number of fills among adults with any opioid use, by condition group and selected sociodemographic characteristics. These two level-of-use measures are consistently highest among those treated for chronic pain conditions and consistently lowest for those treated for non-chronic conditions across population subgroups. Among those treated for non-chronic conditions, only 1.8 percent had four or more fills, and the overall average

number of fills per user was only 1.4. Moreover, within the non-chronic group there was little variation in these two measures across sociodemographic characteristics. Consequently, the non-chronic condition group is excluded from Tables 3 and 4 and not discussed in this section. Following are highlights of notable differences in the level of use measures by sociodemographic characteristics within the chronic pain conditions and other chronic conditions groups.

- *Age:* Among adults in the chronic pain conditions group, those aged 18-44 were less likely to have four or more opioid fills than older adults (11.7 versus 22.4 and 20.3 percent for those aged 45-64 and the elderly, respectively). A much smaller proportion of persons in the other chronic condition group had four or more opioid fills (4.3 percent overall) but those aged 18-44 were about half as likely to have had four or more fills than older adults (2.5 versus about 5 percent).

- *Sex*: The percentage with four or more opioid fills and the average number of fills per user were similar for men and women.

- *Race/ethnicity*: Within each chronic condition group, white and black non-Hispanics were more likely than Hispanics or the Other race/ethnicity group to have four or more opioid fills. This difference was more pronounced in the chronic pain group, with 19.7 percent of whites and 20.9 percent of blacks having four or more fills versus 13.8 percent of Hispanics and 12.4 percent of the Other race/ethnic group. Among adults treated for other chronic conditions, Hispanics had a slightly lower average number of opioid fills per user (2.7) than non-Hispanic whites or blacks (3.3 each).

- *Education:* In both chronic condition groups, adults with some college education were less likely to have four or more opioid fills than those with high school or less education. Similarly, the average number of opioid fills per user was lower for persons with some college than those with less education. For the chronic pain group, the average number of fills was 4.8 for those with some college versus 6.1–6.5 for those with less education. Among the other chronic condition group, the average per user was 2.8 for those with some college versus 3.7–4.0 for those with less education.

- *Employment*: Unemployed persons were more likely to have four or more opioid fills than employed persons in both groups (28.8 versus 9.6 percent for the chronic pain group and 6.8 versus 2.1 percent for the other chronic condition group). On average, unemployed opioid users also had a higher number of fills per user than employed users. Among those with chronic pain, the average per user was 6.6 for unemployed versus 3.7 for employed persons. Among those treated for other chronic conditions, these averages were 4.0 and 2.3, respectively.

- *Poverty status:* Within each chronic condition category, middle/high income adults were less likely than those with less income to have four or more opioid fills. For example, among those treated for chronic pain, 14.0 percent of those with middle/high income had four or more fills versus 33.0 and 25.7 percent of poor/near poor and low income adults, respectively. The average number of opioid fills per user was also lower among middle/high income adults. Among those treated for chronic pain, the average was 4.6 for middle/high income persons versus 6.3–7.0 for persons with lower incomes. Among those treated for other chronic conditions, the average was 2.8 for middle/high income persons versus 3.9–4.1 for persons with lower incomes.

- *Insurance status*:
    - *Ages 18–64:* Among persons with public insurance, 38.4 percent of those in the chronic condition group and 10.3 percent of those in the other chronic conditions group had four or more opioid fills. Within each group, these proportions were more than twice as high as for persons with private coverage or no insurance. The average number of opioid fills per user was also higher for those with public insurance. Among adults treated for chronic pain, this average was 7.7 for those with public insurance versus 4.4 for the privately insured and 6.1 for the uninsured. Among those treated for other chronic conditions, the average fills per user was 4.4 for those with public insurance, 2.5 for the privately insured, and 3.5 for the uninsured.
    - *Age 65 and older*: In both chronic condition groups, those with Medicare and other public insurance were markedly more likely to have four or more fills than those with Medicare only or Medicare and supplemental private coverage. In the chronic pain group, those with Medicare and private insurance had a lower average number of fills per user (4.3) than those with Medicare only (6.0) or Medicare and public insurance (6.7). Among persons in the other chronic conditions group, those with Medicare and other public insurance on average had more fills per user (5.2) than those with Medicare only (3.7) or Medicare and private insurance (3.4).
- *Health status:* In each chronic condition category, adults in fair or poor health were substantially more likely to have four or more opioid fills than adults in good to excellent health. In addition, opioid users in fair/poor health had over two more fills per year on average than those in better health (7.5 versus 4.0 for the chronic pain group and 4.8 versus 2.6 for the non-chronic conditions group).
- *MSA status:* Among adults treated for chronic pain and other chronic conditions, those living outside of MSAs were more likely to have multiple opioid fills. Among those with chronic pain, 25.8 percent of adults not living in MSAs versus 17.3 percent of MSA residents had four or more fills. Users living in non-MSAs had on average about one more fill per year than residents of MSAs with some opioid use.
- *Region:* Among adults with a chronic pain condition, the percentage with four or more opioid fills was lower in the Northeast (12.6 percent) and West (15.6 percent) than in the Midwest (21.2 percent) or South (22.7 percent). Among the chronic pain group, the average number of opioid fills was lowest in the Northeast (4.7 versus about 5.5 in the other Regions). There was no significant regional variation in opioid fills within the other chronic conditions group.

Data Source

The estimates in this Research Findings report are based on data from the MEPS Full Year Consolidated Data Files (HC-163, HC-171, HC-181), Office-Based Medical Provider Visits Files (HC-160G, HC-168G, HC-178G), Outpatient Visits Files (HC-160F, HC-168F, HC-178F), Emergency Visits Files (HC-160E, HC-168E, HC-178E), Hospital Inpatient Stays Files (HC-160D, HC-168D, HC-178D), Prescribed Medicines Files (HC-160A, HC-168A, HC-178A), Home Health Files (HC-160H, HC-168H, HC-178H),

Dental Visits Files (HC-160B, HC-168B, HC-178B), Other Medical Expenses Files (HC-160C, HC-168C, HC-178C), Condition-Event Link Files (HC-160I, HC-168I, HC-178I), and non-public versions of Conditions Files with the fully specified ICD-9 codes for 2013, 2014 and 2015. The public use files are available at https://meps.ahrq.gov/mepsweb/data_stats/download_data_files.jsp.

Definitions

Opioid fills

In this report, we examine outpatient prescription fills of opioids that are commonly used to treat pain. These opioids are identified using generic drug names for narcotic analgesics and narcotic analgesic combinations in the Multum Lexicon database from Cerner Multum, Inc. We identify slightly more opioids commonly used for pain than one would find in the MEPS public use files due to methods used to preserve the confidentiality of sample members. We excluded opioids not used for pain management from this analysis. These exclusions, which encompass respiratory agents, antitussives, and drugs commonly used in Medication Assisted Treatment, comprise about 8.5 percent of opioid fills reported in MEPS.

MEPS estimates of opioid use may differ from estimates based on other data sources for a variety of methodological reasons including:

- Only prescribed drugs purchased in outpatient settings are included; prescription medicines administered in an inpatient setting or in a clinic or physician's office are excluded.
- Data are household reported and one respondent typically reports for the entire household.
- A computer assisted personal interviewing (CAPI) data collection mode is used and questions are asked for a recall period of about 3–6 months.

Medical condition groups

The data on medical conditions used in this report to classify adults were reported by MEPS household respondents as associated with one or more enumerated healthcare event during the year. The MEPS event types for which associated condition information is collected include office-based medical visits, hospital outpatient department visits, visits to emergency departments, hospital inpatient stays, prescribed medicines fills, and home healthcare. Reported medical conditions are recorded as verbatim text by interviewers and then professionally coded for MEPS analytic files to ICD-9-CM[6] codes. These codes were used to hierarchically classify adults with one or more healthcare events during the year into the three mutually exclusive groups of adults with "treated conditions" that are delineated below. In developing these groups, chronic and non-chronic conditions were defined using the AHRQ Healthcare Utilization Project Clinical Classification Software (4) and Chronic Condition Indicator (CCI) (5) tools, while conditions associated with chronic pain were identified based on the Weitzman Quality Institute method (6).

[6] Note that more recent 2016 MEPS data could not be used for this report because HCUP Clinical Classification Software has not yet been adapted for the change from ICD-9 to ICD-10 coding.

- *Chronic pain group*

  Based on a method from the Weitzman Quality Institute, individuals with any healthcare events associated with the following ICD-9-CM condition codes listed in the table below are classified as having chronic pain.

ICD-9-CM	Condition Description
307.80	Psychogenic pain, site unspecified
307.89	Other pain disorders related to psychological factors
338.0	Central pain syndrome
338.21	Chronic pain due to trauma
338.22	Chronic post-thoracotomy pain
338.28	Other chronic postoperative pain
338.29	Other chronic pain
338.4	Chronic pain syndrome
719.41	Pain in joint, shoulder region
719.45	Pain in joint, pelvic region and thigh
719.46	Pain in joint, lower leg
719.47	Pain in joint, ankle and foot
719.49	Pain in joint, multiple sites
720.0	Ankylosing spondylitis
720.2	Sacroiliitis, not elsewhere classified
720.9	Unspecified inflammatory spondylopathy
721.0	Cervical spondylosis without myelopathy
721.1	Cervical spondylosis with myelopathy
721.2	Thoracic spondylosis without myelopathy
721.3	Lumbosacral spondylosis without myelopathy
721.41	Spondylosis with myelopathy, thoracic region
721.42	Spondylosis with myelopathy, lumbar region
721.6	Ankylosing vertebral hyperostosis
721.8	Other allied disorders of spine
721.90	Spondylosis of unspecified site, without mention of myelopathy
721.91	Spondylosis of unspecified site, with myelopathy
722.0	Displacement of cervical intervertebral disc without myelopathy
722.10	Displacement of lumbar intervertebral disc without myelopathy
722.11	Displacement of thoracic intervertebral disc without myelopathy
722.2	Displacement of intervertebral disc, site unspecified, without myelopathy
722.30	Schmorl's nodes, unspecified region
722.31	Schmorl's nodes, thoracic region
722.32	Schmorl's nodes, lumbar region
722.39	Schmorl's nodes, other region
722.4	Degeneration of cervical intervertebral disc
722.51	Degeneration of thoracic or thoracolumbar intervertebral disc
722.52	Degeneration of lumbar or lumbosacral intervertebral disc
722.6	Degeneration of intervertebral disc, site unspecified
722.70	Intervertebral disc disorder with myelopathy, unspecified region

722.71	Intervertebral disc disorder with myelopathy, cervical region
722.73	Intervertebral disc disorder with myelopathy, lumbar region
722.80	Postlaminectomy syndrome, unspecified region
722.81	Postlaminectomy syndrome, cervical region
722.82	Postlaminectomy syndrome, thoracic region
722.83	Postlaminectomy syndrome, lumbar region
722.90	Other and unspecified disc disorder, unspecified region
722.91	Other and unspecified disc disorder, cervical region
722.92	Other and unspecified disc disorder, thoracic region
722.93	Other and unspecified disc disorder, lumbar region
723.0	Spinal stenosis in cervical region
723.1	Cervicalgia
723.3	Cervicobrachial syndrome (diffuse)
723.4	Brachial neuritis or radiculitis NOS
723.5	Torticollis, unspecified
723.6	Panniculitis specified as affecting neck
723.7	Ossification of posterior longitudinal ligament in cervical region
723.8	Other syndromes affecting cervical region
723.9	Unspecified musculoskeletal disorders and symptoms referable to neck
724.00	Spinal stenosis, unspecified region
724.01	Spinal stenosis, thoracic region
724.02	Spinal stenosis, lumbar region, without neurogenic claudication
724.09	Spinal stenosis, other region
724.1	Pain in thoracic spine
724.2	Lumbago
724.3	Sciatica
724.4	Thoracic or lumbosacral neuritis or radiculitis, unspecified
724.5	Backache, unspecified
724.6	Disorders of sacrum
724.70	Unspecified disorder of coccyx
724.79	Other disorders of coccyx
724.8	Other symptoms referable to back
724.9	Other unspecified back disorders
729.0	Rheumatism, unspecified and fibrositis
729.1	Myalgia and myositis, unspecified
729.2	Neuralgia, neuritis, and radiculitis, unspecified
729.4	Fasciitis, unspecified
729.5	Pain in limb

- *Other chronic condition group*

  Excluding individuals in the chronic pain group defined above, the determination of chronic conditions to classify individuals into this group was based on application of the AHRQ Healthcare Utilization Project Clinical Classification Software (4) and Chronic Condition Indicator (CCI) (5) tools to the MEPS medical conditions reported by MEPS respondents as being associated with medical events during the year. The CCI considers chronic conditions to be those

lasting 12 months or longer which also place limitations on self-care, independent living, and social interactions or result in the need for ongoing intervention with medical products, services, and special equipment. The CCI algorithm originated with work by a physician panel that reviewed diagnosis codes appearing in MEPS data (7). About 81 percent of persons in this category had some medical treatment for one or more of the 10 chronic conditions listed in the table below.

ICD-9-CM	Condition Description
401.9	Essential hypertension, unspecified
272.0	Pure hypercholesterolemia
250.00	Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled
311	Depressive disorder, not elsewhere classified
300.00	Anxiety state, unspecified
530.81	Esophageal reflux
477.9	Allergic rhinitis, cause unspecified
493.90	Asthma, unspecified type, unspecified
473.9	Chronic sinusitis, unspecified
414.9	Chronic ischemic heart disease, unspecified

- *Non-chronic condition group*

  This category comprises individuals who had one or more ICD-9-CM codes associated with one or more healthcare events but were not classified in the “chronic pain” or “other chronic condition” groups above.

Race/ethnicity

Classification by race/ethnicity is based on information reported for each family member. First, respondents were asked if the person’s main national origin or ancestry was Puerto Rican; Cuban; Mexican, Mexican-American, or Chicano; other Latin American; or other Spanish. All persons whose main national origin or ancestry was reported in one of these Hispanic groups, regardless of racial background, were classified as Hispanic. All other persons were classified according to their reported race. For this analysis, the following classification by race/ethnicity was used: Hispanic (any race), white non-Hispanic, black non-Hispanic, and Other.

Employment status

Employment status is based on the person’s employment status at the end of the year. If missing, the most recent non-missing employment status variable is used. A negligible percentage of persons had a missing response for employment status.

Poverty status

Each sample person was classified according to the total annual income of his or her family. Possible sources of income included annual earnings from wages, salaries, bonuses, tips, and commissions; business and farm gains and losses; unemployment and Worker’s Compensation; interest and dividends; alimony, child support, and other private cash transfers; private pensions, individual retirement account (IRA) withdrawals, Social Security, and Department of Veterans Affairs payments; Supplemental

Security Income and cash welfare payments from public assistance, Aid to Families with Dependent Children, and Aid to Dependent Children; gains or losses from estates, trusts, partnerships, S corporations, rent, and royalties; and a small amount of "other" income. Poverty status is the ratio of family income to the corresponding federal poverty thresholds, which control for family size and age of the head of family. Categories are defined as follows:

- *Poor/Near Poor:* Household income less than 125 percent of the federal poverty line
- *Low income*: Household income of 125 percent of the poverty line up to 200 percent of the federal poverty line
- *Middle/High income*: Household income of 200 percent or more of the poverty line

Health insurance status

Individuals ages 18–64 were classified in the following three insurance categories, based on household responses to health insurance status questions:

- *Any private health insurance*: Individuals who, at any time during the year, had insurance that provided coverage for hospital and physician care (other than Medicare, Medicaid, or other public hospital/physician coverage) were classified as having private insurance. Coverage by TRICARE (Armed Forces-related coverage) was also included as private health insurance. Insurance that provided coverage for a single service only, such as dental or vision coverage, was not included.
- *Public coverage only*: Individuals were considered to have public coverage only if they met both of the following criteria: 1) They were not covered by private insurance at any time during the year, and 2) they were covered by any of the following public programs at any point during the year: Medicare, Medicaid, or other public hospital/physician coverage.
- *Uninsured*: The uninsured were defined as people not covered by private hospital/physician insurance, Medicare, TRICARE, Medicaid, or other public hospital/physician programs at any time during the entire year or period of eligibility for the survey.

Individuals age 65 and older were classified into the following three insurance categories, based on household responses to health insurance status questions:

- *Medicare and private insurance*: This category includes people classified as Medicare beneficiaries and covered by Medicare and a supplementary private policy.
- *Medicare and other public insurance*: This category includes people classified as Medicare beneficiaries who met both of the following criteria: 1) they were not covered by private insurance at any point during the year, and 2) they were covered by one of the following public programs at any point during the year: Medicaid, other public hospital/physician coverage.
- *Medicare only*: This category includes people classified as Medicare beneficiaries but not classified as Medicare and private insurance or as Medicare and other public insurance. This group includes people who were enrolled in Medicare HMOs and people who had Medicare fee-for-service coverage only.

Health status

The MEPS respondent was asked to rate the health of each person in the family at the time of the interview according to one of the following categories: excellent, very good, good, fair, or poor. Health status in this report is based on the status reported at the last interview of participation. If missing, the most recent non-missing health status variable is used. A negligible percentage of persons had a missing response for health status.

Metropolitan Statistical Area (MSA) status

This variable is based on the location of the household at the end of the year and reflects the most recent delineations of MSAs established by the Office of Management and Budget (OMB). An MSA contains a core urban area of 50,000 or more population. All counties that are not part of an MSA are grouped as non-MSA.

Census region

The Census region variable is based on the location of the household at the end of the year. If missing, the most recent location available is used.

- *Northeast*: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania
- *Midwest*: Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas
- *South*: Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas
- *West*: Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Alaska, and Hawaii

About MEPS-HC

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 https://meps.ahrq.gov/.

References

1. Rudd RA, Seth P, David F, Scholl L. Increases in Drug and Opioid-Involved Overdose Deaths – United States, 2010–2015. MMWR Morb Mortal Wkly Rep 2016 Dec 30;65(50-51):1445–1452.

2. CDC Guidelines for Prescribing Opioids for Chronic Pain. Atlanta, GA: Centers for Disease Control and Prevention. https://www.cdc.gov/drugoverdose/pdf/guidelines_at-a-glance-a.pdf

3. Dowell D, Haegerich T, Chou R. No Shortcuts to Safer Opioid Prescribing. *N Engl J Med*. 2019 Jun 13;380(24):2285–2287.

4. Healthcare Cost and Utilization Project (HCUP) Clinical Classification Software. Healthcare Cost and Utilization Project. Rockville, MD: Agency for Healthcare Research and Quality. https://www.hcup-us.ahrq.gov/toolssoftware/ccs/ccs.jsp

5. Healthcare Cost and Utilization Project (HCUP) Chronic Condition Indicator. Healthcare Cost and Utilization Project. Rockville, MD: Agency for Healthcare Research and Quality. https://www.hcup-us.ahrq.gov/toolssoftware/chronic/chronic.jsp

6. Tian TY, Zlaveta I, Anderson DR. Using electronic health records data to identify patients with chronic pain in a primary care setting. *J Am Med Inform Assoc*. 2013 Dec;20(e2):e275–80.

7. Hwang W, Weller W, Irey H, Anderson G. Out-of-pocket medical spending for care of chronic conditions. *Health Aff (Millwood)*. 2001 Nov-Dec;20(6):267–78.

Table 1. Average annual percentage distribution of adults by demographic characteristics within treated condition groups, 2013–2015

Characteristics	All adults	Treated condition group			
		Chronic pain	Other chronic	Non-chronic	No conditions or no events
Age					
18–44	46.1 (0.5)	27.7 (0.9)	29.3 (0.6)	71.2 (0.7)	68.4 (0.6)
45-64	34.2 (0.4)	42.8 (0.9)	39.5 (0.5)	24.5 (0.7)	26.9 (0.6)
65 and older	19.6 (0.4)	29.5 (0.9)	31.1 (0.7)	4.4 (0.4)	4.7 (0.3)
Sex					
Male	48.3 (0.2)	41.0 (0.7)	44.6 (0.4)	43.7 (0.7)	60.8 (0.5)
Female	51.7 (0.2)	59.0 (0.7)	55.4 (0.4)	56.3 (0.7)	39.2 (0.5)
Race/ethnicity					
Hispanic	15.4 (0.8)	10.1 (0.6)	10.7 (0.6)	17.7 (1.0)	24.5 (1.2)
White	64.5 (1.0)	74.3 (0.9)	71.4 (0.9)	62.0 (1.3)	49.5 (1.3)
Black	11.7 (0.6)	9.6 (0.6)	11.0 (0.6)	11.0 (0.6)	14.4 (0.8)
Other	8.4 (0.6)	6.1 (0.5)	6.9 (0.5)	9.4 (0.7)	11.5 (0.9)
Education					
Less than high school	14.2 (0.4)	11.8 (0.6)	13.0 (0.4)	13.5 (0.5)	17.9 (0.6)
High school	27.3 (0.4)	26.2 (0.8)	27.4 (0.5)	24.8 (0.6)	29.1 (0.6)
Some college	58.5 (0.6)	62.0 (1.0)	59.6 (0.6)	61.7 (0.8)	53.0 (0.7)
Employment status					
Employed	62.5 (0.5)	52.0 (0.9)	53.9 (0.6)	75.4 (0.6)	74.6 (0.6)
Not employed	37.5 (0.5)	48.0 (0.9)	46.1 (0.6)	24.6 (0.6)	25.4 (0.6)
Poverty status					
Poor/near poor	16.7 (0.4)	17.6 (0.6)	15.6 (0.5)	16.1 (0.5)	18.4 (0.6)
Low income	13.5 (0.3)	12.6 (0.5)	13.0 (0.3)	11.9 (0.4)	15.6 (0.4)

Characteristics	All adults	Treated condition group			
		Chronic pain	Other chronic	Non-chronic	No conditions or no events
Middle/high income	69.9 (0.6)	69.8 (0.8)	71.4 (0.6)	72.0 (0.7)	66.0 (0.8)
Insurance status					
Ages 18–64					
Any private	71.2 (0.7)	72.7 (0.9)	76.1 (0.6)	75.4 (0.9)	62.2 (0.9)
Public only	13.9 (0.5)	20.1 (0.9)	15.5 (0.6)	12.3 (0.6)	10.4 (0.5)
Uninsured	15.0 (0.5)	7.2 (0.5)	8.3 (0.4)	12.3 (0.6)	27.4 (0.8)
Age 65 and older					
Medicare only	34.8 (0.9)	31.4 (1.5)	34.7 (0.9)	34.8 (3.6)	48.3 (2.6)
Medicare and private	54.1 (1.0)	56.9 (1.6)	54.4 (1.1)	56.1 (3.5)	39.4 (2.4)
Medicare and other public	11.1 (0.6)	11.6 (1.0)	10.9 (0.6)	9.1 (1.5)	12.3 (1.4)
Health status					
Excellent/very good/good	86.7 (0.3)	74.0 (0.8)	82.3 (0.4)	95.1 (0.2)	95.7 (0.2)
Fair/poor	13.3 (0.3)	26.0 (0.8)	17.7 (0.4)	4.9 (0.2)	4.3 (0.2)
MSA status					
MSA	85.4 (1.1)	82.8 (1.7)	84.3 (1.2)	85.9 (1.2)	88.3 (0.9)
Non-MSA	14.6 (1.1)	17.2 (1.7)	15.7 (1.2)	14.1 (1.2)	11.7 (0.9)
Region					
Northeast	18.1 (0.6)	17.7 (1.1)	19.0 (0.8)	16.7 (0.8)	17.7 (0.8)
Midwest	21.3 (0.7)	24.5 (1.1)	22.4 (0.8)	21.2 (0.8)	17.9 (0.7)
South	37.2 (0.9)	33.2 (1.3)	38.2 (1.0)	36.4 (1.1)	38.2 (1.1)
West	23.4 (0.6)	24.6 (1.1)	20.4 (0.7)	25.7 (0.9)	26.2 (0.9)

Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey, Household Component, 2013–2015.

Note: Standard errors appear in parentheses.

Table 2. Average annual percentage of adults with at least one opioid fill by treated condition group, 2013-2015

Characteristics	All adults*	Treated condition group		
		Chronic pain	Other chronic	Non-chronic
Total	15.6 (0.3)	40.5 (0.8)	16.6 (0.3)	15.9 (0.5)
Age				
18–44	11.5 (0.3)	32.1 (1.3)	15.8 (0.6)	16.8 (0.6)
45-64	18.2 (0.4)	43.5 (1.2)	17.4 (0.5)	14.9 (0.9)
65 and older	20.8 (0.7)	44.2 (1.4)	16.3 (0.6)	7.3 (1.3)
Sex				
Male	13.6 (0.3)	40.2 (1.2)	14.9 (0.5)	17.9 (0.9)
Female	17.5 (0.3)	40.8 (1.0)	17.9 (0.4)	14.4 (0.6)
Race/ethnicity				
Hispanic	10.4 (0.3)	32.1 (1.5)	14.1 (0.6)	16.1 (0.8)
White	17.4 (0.3)	41.5 (1.0)	17.1 (0.4)	15.5 (0.7)
Black	15.9 (0.4)	47.0 (1.6)	18.1 (0.7)	19.9 (0.9)
Other	10.5 (0.7)	32.3 (2.5)	13.2 (1.0)	13.6 (1.4)
Education				
Less than high school	16.2 (0.5)	47.8 (1.9)	19.2 (0.7)	18.3 (1.3)
High school	17.5 (0.5)	47.3 (1.7)	18.0 (0.6)	21.2 (1.1)
Some college	14.6 (0.3)	36.3 (0.9)	15.4 (0.4)	13.3 (0.6)
Employment status				
Employed	11.9 (0.2)	30.5 (0.9)	13.7 (0.4)	15.5 (0.6)
Not employed	21.8 (0.5)	51.3 (1.2)	20.0 (0.5)	17.3 (0.9)
Poverty status				
Poor/near poor	20.9 (0.6)	55.6 (1.4)	22.7 (0.7)	22.0 (1.2)
Low income	17.6 (0.6)	49.6 (2.0)	19.6 (0.8)	19.6 (1.3)

Characteristics	All adults*	Treated condition group		
		Chronic pain	Other chronic	Non-chronic
Middle/high income	13.9 (0.3)	35.1 (0.9)	14.7 (0.4)	13.9 (0.6)
Insurance status				
Ages 18–64				
Any private	13.4 (0.3)	33.3 (1.0)	15.0 (0.4)	15.0 (0.6)
Public only	26.0 (0.7)	60.9 (1.7)	26.8 (0.9)	23.0 (1.3)
Uninsured	7.8 (0.4)	35.8 (3.0)	13.3 (1.0)	17.6 (1.2)
Age 65 and older				
Medicare only	20.2 (0.9)	46.0 (2.3)	16.2 (0.9)	7.7 (2.4)
Medicare and private	20.2 (0.9)	41.2 (1.8)	15.5 (0.7)	6.7 (1.8)
Medicare and other public	26.4 (1.4)	53.5 (3.3)	20.9 (1.4)	9.0 (4.0)
Health status				
Excellent/very good/good	12.7 (0.2)	32.8 (0.8)	14.2 (0.3)	15.4 (0.5)
Fair/poor	34.7 (0.7)	62.4 (1.2)	27.7 (0.8)	25.2 (2.0)
MSA status				
MSA	14.9 (0.3)	39.5 (0.8)	15.9 (0.3)	15.6 (0.5)
Non-MSA	19.8 (0.8)	45.5 (2.4)	20.0 (0.9)	18.0 (1.4)
Region				
Northeast	12.4 (0.5)	32.6 (1.4)	13.1 (0.5)	12.5 (1.1)
Midwest	17.6 (0.6)	43.5 (1.6)	17.3 (0.7)	15.8 (1.0)
South	16.7 (0.5)	46.3 (1.7)	17.7 (0.5)	17.8 (0.9)
West	14.6 (0.6)	35.6 (1.5)	16.9 (0.7)	15.6 (1.0)

Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey, Household Component, 2013–2015.

Note: Standard errors appear in parentheses.

* Total includes two categories of individuals not shown separately: 1) those with no healthcare events reported, and 2) those without any specific conditions associated with any of their reported events.

Table 3. Average annual percentage of adults with four or more opioid fills by treated condition group, 2013–2015

Characteristics	All adults*	Treated condition group	
		Chronic pain	Other chronic
Total	4.6 (0.2)	18.8 (0.6)	4.3 (0.2)
Age			
18–44	1.8 (0.1)	11.7 (0.8)	2.5 (0.2)
45-64	6.4 (0.3)	22.4 (1.1)	4.8 (0.3)
65 and older	8.0 (0.4)	20.3 (1.2)	5.3 (0.3)
Sex			
Male	4.0 (0.2)	19.1 (0.9)	4.1 (0.3)
Female	5.1 (0.2)	18.5 (0.8)	4.5 (0.2)
Race/ethnicity			
Hispanic	2.3 (0.2)	13.8 (1.2)	3.0 (0.3)
White	5.4 (0.2)	19.7 (0.8)	4.5 (0.2)
Black	4.5 (0.2)	20.9 (1.3)	5.1 (0.4)
Other	2.5 (0.4)	12.4 (1.6)	3.1 (0.5)
Education			
Less than high school	5.9 (0.3)	27.0 (1.6)	6.6 (0.5)
High school	5.9 (0.3)	24.7 (1.2)	5.6 (0.4)
Some college	3.6 (0.2)	14.6 (0.8)	3.2 (0.2)
Employment status			
Employed	2.0 (0.1)	9.6 (0.6)	2.1 (0.2)
Not employed	8.9 (0.3)	28.8 (1.0)	6.8 (0.3)
Poverty status			
Poor/near poor	8.2 (0.4)	33.0 (1.4)	7.8 (0.5)
Low income	6.4 (0.3)	25.7 (1.6)	7.1 (0.5)

Characteristics	All adults*	Treated condition group	
		Chronic pain	Other chronic
Middle/high income	3.4 (0.1)	14.0 (0.6)	3.0 (0.2)
Insurance status			
Ages 18–64			
Any private	2.6 (0.1)	12.5 (0.7)	2.5 (0.2)
Public only	11.3 (0.5)	38.4 (1.6)	10.3 (0.7)
Uninsured	2.1 (0.3)	18.7 (2.6)	4.1 (0.7)
Age 65 and older			
Medicare only	8.1 (0.6)	23.9 (2.0)	5.1 (0.5)
Medicare and private	6.8 (0.5)	15.9 (1.4)	4.6 (0.4)
Medicare and other public	14.0 (1.2)	32.4 (3.3)	10.0 (1.1)
Health status			
Excellent/very good/good	2.6 (0.1)	11.5 (0.6)	2.8 (0.2)
Fair/poor	17.6 (0.6)	39.4 (1.3)	11.4 (0.6)
MSA status			
MSA	4.0 (0.1)	17.3 (0.7)	3.7 (0.2)
Non-MSA	7.9 (0.6)	25.8 (1.6)	7.2 (0.6)
Region			
Northeast	3.3 (0.2)	12.6 (1.0)	3.2 (0.3)
Midwest	5.6 (0.3)	21.2 (1.2)	4.7 (0.4)
South	5.1 (0.3)	22.7 (1.4)	4.8 (0.3)
West	3.8 (0.4)	15.6 (1.2)	3.9 (0.5)

Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey, Household Component, 2013–2015.

Note: Standard errors appear in parentheses.

* Total includes three categories of individuals not shown separately: 1) those with no healthcare events reported, 2) those without any specific conditions associated with any of their reported events, and 3) those only treated for non-chronic conditions.

Table 4. Average annual number of opioid fills per adult with at least one fill by treated condition group, 2013–2015

Characteristics	All adults*	Treated condition group	
		Chronic pain	Other chronic
Total	3.7 (0.1)	5.4 (0.1)	3.3 (0.1)
Age			
18–44	2.5 (0.1)	4.4 (0.2)	2.5 (0.1)
45-64	4.4 (0.1)	6.1 (0.2)	3.4 (0.1)
65 and older	4.4 (0.2)	5.2 (0.3)	3.7 (0.2)
Sex			
Male	3.8 (0.1)	5.6 (0.2)	3.4 (0.1)
Female	3.7 (0.1)	5.3 (0.2)	3.2 (0.1)
Race/ethnicity			
Hispanic	3.0 (0.2)	5.3 (0.4)	2.7 (0.1)
White	3.9 (0.1)	5.6 (0.2)	3.3 (0.1)
Black	3.5 (0.1)	5.0 (0.2)	3.3 (0.2)
Other	3.3 (0.2)	4.8 (0.5)	3.2 (0.3)
Education			
Less than high school	4.4 (0.2)	6.5 (0.3)	4.0 (0.2)
High school	4.2 (0.1)	6.1 (0.3)	3.7 (0.2)
Some college	3.3 (0.1)	4.8 (0.2)	2.8 (0.1)
Employment status			
Employed	2.5 (0.1)	3.7 (0.2)	2.3 (0.1)
Not employed	4.9 (0.1)	6.6 (0.2)	4.0 (0.1)
Poverty status			
Poor/near poor	4.8 (0.2)	7.0 (0.2)	4.1 (0.2)
Low income	4.3 (0.2)	6.3 (0.4)	3.9 (0.2)

Characteristics	All adults*	Treated condition group	
		Chronic pain	Other chronic
Middle/high income	3.2 (0.1)	4.6 (0.2)	2.8 (0.1)
Insurance status			
Ages 18–64			
Any private	2.8 (0.1)	4.4 (0.2)	2.5 (0.1)
Public only	5.4 (0.1)	7.7 (0.3)	4.4 (0.2)
Uninsured	3.4 (0.2)	6.1 (0.6)	3.5 (0.4)
Age 65 and older			
Medicare only	4.7 (0.3)	6.0 (0.4)	3.7 (0.3)
Medicare and private	3.8 (0.2)	4.3 (0.3)	3.4 (0.2)
Medicare and other public	5.8 (0.4)	6.7 (0.6)	5.2 (0.5)
Health status			
Excellent/very good/good	2.8 (0.1)	4.0 (0.1)	2.6 (0.1)
Fair/poor	6.0 (0.2)	7.5 (0.2)	4.8 (0.2)
MSA status			
MSA	3.5 (0.1)	5.3 (0.1)	3.0 (0.1)
Non-MSA	4.6 (0.2)	6.1 (0.3)	4.2 (0.2)
Region			
Northeast	3.4 (0.2)	4.7 (0.2)	3.2 (0.2)
Midwest	3.9 (0.1)	5.5 (0.3)	3.2 (0.1)
South	3.8 (0.1)	5.6 (0.2)	3.4 (0.1)
West	3.6 (0.2)	5.5 (0.3)	3.1 (0.2)

Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey, Household Component, 2013–2015.

Note: Standard errors appear in parentheses.

* Total includes three categories of individuals not shown separately: 1) those with no healthcare events reported, 2) those without any specific conditions associated with any of their reported events, and 3) those only treated for non-chronic conditions.