



Opioids

Deaths from drug overdoses have risen steadily over the past 2 decades. The misuse of opioids, such as prescription pain medications and heroin, has become widespread across the United States. In response to dramatic increases in opioid-related illnesses and deaths, the Department of Health and Human Services is focused on implementing evidence-based approaches to reduce opioid misuse, overdoses and deaths. AHRQ, along with other HHS Operating and Staff Divisions, supports the HHS 5-Point Strategy To Combat the Opioids Crisis, which includes:

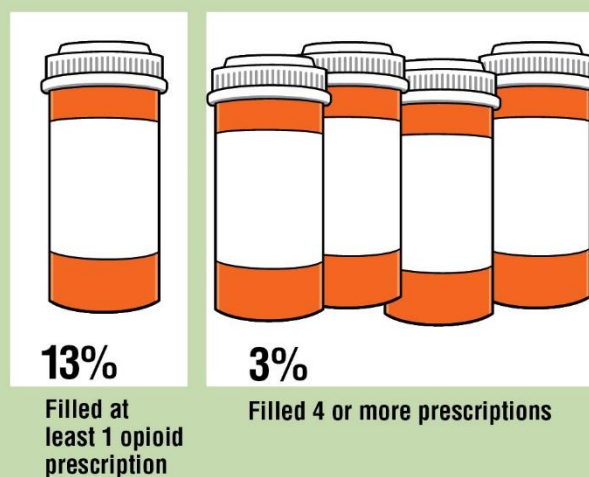
- Better addiction prevention, treatment, and recovery services
- Better data
- Better research
- Better targeting of overdose-reversing drugs
- Better pain management

Of these, AHRQ focus areas are: better addiction prevention, treatment, and recovery services; better data; and better research.

Research

AHRQ is supporting primary care practices in delivering evidence-based medication-assisted treatment (MAT) for opioid abuse in rural areas. Communities in rural areas are among the hardest hit by the opioid epidemic. MAT, which uses FDA-approved medications combined with psychosocial treatments, is an effective way to treat opioid use disorder, but access to this treatment is often limited in rural communities. In 2016, AHRQ invested about \$12 million over 3 years in a [series of grants](#) that are exploring and testing solutions aimed at overcoming barriers to the use of MAT in rural primary care settings.

Average Annual Opioid Prescription Use Among Non-Elderly Adults 2015-2016



The grants are also providing MAT access to more than 20,000 individuals struggling with opioid addiction using innovative technology. Such strategies include patient-controlled smart phone apps, and remote training and expert consultation using a telehealth program that began with AHRQ support, linking specialists at an academic hub to primary care providers working in rural communities.

Practice Improvement

AHRQ is also assisting practices in delivering MAT and conducting research into alternatives to opioids with the resources below.



- [Implementing Medication-Assisted Treatment for Opioid Use Disorder in Rural Primary Care: Environmental Scan, Volumes 1 and 2](#). Volume 1 identifies significant challenges and barriers that may limit access to MAT services in rural primary care settings, including those related to workforce, stigma, logistics, financing, and policy. The report highlights essential characteristics of effective MAT practices and identifies models of care that may help overcome challenges to implementing MAT in rural primary care settings. Volume 2 includes nearly 250 tools and resources available to providers, patients, and communities to help implement MAT in rural primary care settings. Tools are categorized by topic and address the full spectrum of needs for patients with or at risk for opioid use disorder, including prevention, training and education, treatment, and overdose.
- [Medication-Assisted Treatment Models of Care for Opioid Use Disorder in Primary Care Settings](#). This technical brief from AHRQ's Evidence-based Practice Center program examined 12 promising and innovative MAT models of care, summarizes the evidence available on MAT models of care in primary care settings, identifies gaps in the evidence base, and provides guidance for future research.

Another AHRQ publication addresses alternatives to opioids for treating chronic pain. [Noninvasive Nonpharmacological Treatment for Chronic Pain: A Systematic Review](#) examined nonpharmacological treatment for five common types of chronic musculoskeletal pain, representing the most common causes of chronic pain, by assessing the interventions' effects on pain and functioning over the short, intermediate, and long terms. Interventions that improved function and/or pain for at least 1 month when used for—

- Chronic low back pain: Exercise, psychological therapies (primarily cognitive behavioral therapy), spinal manipulation, low-level laser therapy, massage, mindfulness-based stress reduction, yoga, acupuncture, multidisciplinary rehabilitation.
- Chronic neck pain: Exercise, low-level laser, Alexander Technique, acupuncture.
- Knee osteoarthritis: Exercise, ultrasound.
- Hip osteoarthritis: Exercise, manual therapies.
- Fibromyalgia: Exercise, cognitive behavioral therapy, myofascial release massage, tai chi,

qigong, acupuncture, multidisciplinary rehabilitation.

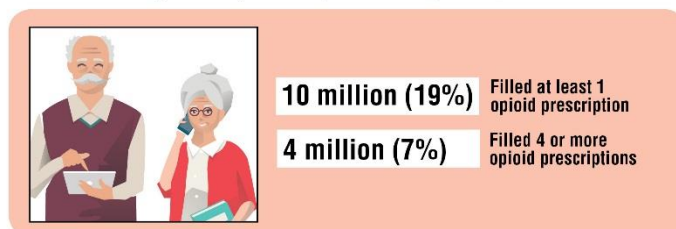
- Chronic tension headache: Spinal manipulation.

Additionally, an AHRQ grantee developed [Six Building Blocks: A Team-Based Approach to Improving Opioid Management in Primary Care](#). The website offers a structured, systems-based approach for primary care providers and their staff members to improve management of patients on chronic opioid therapy. The six building blocks are:

1. Demonstrate leadership support and develop consensus
2. Revise and implement policies, patient agreements, and workflows
3. Proactively track and monitor patient care
4. Implement planned, patient-centered visits
5. Develop resources to care for complex patients
6. Measure implementation success

The site also has a self-assessment, an implementation guide, and links to helpful resources.

Average Annual Opioid Prescription Use Among Seniors, 2015-2016



Source: Medical Expenditure Panel Survey, Any Use and Frequent Use of Opioids among Elderly Adults in 2015-2016, by Socioeconomic Characteristics, September 2018

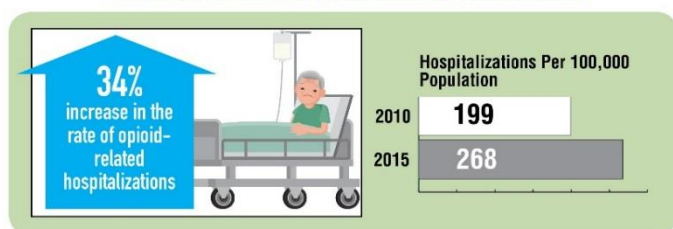
Data and Analytics

AHRQ's two largest data sources, the [Healthcare Cost and Utilization Project](#) (HCUP) and the [Medical Expenditure Panel Survey](#) (MEPS), collect a wealth of data that help expand the knowledge base on opioids.

AHRQ has published several statistical briefs that characterize the opioid crisis. This information is crucial for health care policymakers at all levels in the health care system as they formulate strategies for combating opioid misuse. Highlights from selected publications are below, in reverse chronological order, and the full reports are available on the HCUP and MEPS websites.

The HCUP Statistical Brief "Opioid-Related Inpatient Stays and Emergency Department Visits Among Patients Aged 65 Years and Older, 2010 and 2015," published in September 2018, showed a 74.2 percent increase in the rate of opioid-related emergency department visits

Increase in Opioid-Related Hospitalizations Among Seniors, 2010-2015



Source: Healthcare Cost and Utilization Project, *Opioid-Related Inpatient Stays and Emergency Department Visits Among Patients Aged 65 Years and Older, 2010 and 2015*, September 2018

among patients aged 65 years and older, from 44.7 to 77.9 per 100,000 population, versus a 17.4 percent increase in the rate of nonopioid-related emergency department visits.

The MEPS Statistical Brief “Any Use and Frequent Use of Opioids among Elderly Adults in 2015-2016, by Socioeconomic Characteristics,” published in September 2018, showed that the average annual rates of any outpatient opioid use among elderly adults increased as health status declined, ranging from 6.1 percent for those in excellent health to 45.4 percent for those in poor health. Similarly, rates of frequent use increased among elderly adults from 0.2 percent to 26.4 percent as health status declined from excellent to poor.

The MEPS Statistical Brief “Any Use and Frequent Use of Opioids among Non-Elderly Adults in 2015-2016, by Socioeconomic Characteristics,” also published in September 2018, showed that 13.0 percent of non-elderly adults, on average, filled at least 1 outpatient opioid prescription; 3.1 percent of non-elderly adults had 4 or more prescription fills during the year; and non-elderly women were more likely than men to have any opioid use during the year (14.8 percent vs. 11.1 percent) and to have frequent opioid use (3.6 percent vs. 2.6 percent).

The HCUP Statistical Brief “Payers of Opioid-Related Inpatient Stays and Emergency Department Visits Nationally and by State, 2010 and 2015,” published in May 2018, showed that from 2005 to 2014, the rate of opioid-related inpatient stays increased faster for females than for males. By 2014, the rate was virtually the same for both sexes.

The MEPS Statistical Brief “Total Expenses, Total Utilization, and Sources of Payment for Outpatient Prescription Opioids in the U.S. Adult Civilian Noninstitutionalized Population, 2015,” published in November 2017, showed that, in 2015, total outpatient

prescription opioid expenses for adults totaled \$10.7 billion with hydrocodone and oxycodone accounting for nearly three-quarters of total expenses (\$5.0 and \$2.8 billion, respectively).

The HCUP Statistical Brief “Patient Characteristics of Opioid-Related Inpatient Stays and Emergency Department Visits Nationally and by State, 2014,” published in June 2017, showed that opioid-related hospital stays involving misuse of prescription pain relievers or use of illicit opioids, such as heroin, increased nationwide by 64 percent between 2005 and 2014. Further, hospitalizations involving opioid pain relievers and heroin increased 75 percent for women between 2005 and 2014, a jump that significantly outpaced the 55 percent increase among men. Because of the accelerated rates among women during that 10-year period, women and men were hospitalized at virtually the same rate nationwide in 2014--about 225 hospitalizations per 100,000 people.

The HCUP Statistical Brief “Opioid-Related Hospital Stays and Emergency Department Visits by State, 2009–2014,” published in January 2017, showed that opioid-related hospital stays involving misuse of prescription pain relievers or use of illicit opioids such as heroin increased nationwide by 64 percent between 2005 and 2014. Trends vary widely among States. Focusing on the most recent years of data available, Georgia, North Carolina, Oregon, South Dakota, and Washington State reported that opioid-related stay rates increased by at least 60 percent between 2009 and 2014. Meanwhile, rates decreased in Illinois, Kansas, Louisiana, and Maryland during the same period.

The MEPS Statistical Brief “Trends in Prescribed Outpatient Opioid Use and Expenses in the U.S. Civilian Noninstitutionalized Population, 2002-2012,” published in August 2015, showed that 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 among the U.S. civilian noninstitutionalized population, and total prescription opioid purchases increased from 85.9 million to 143.9 million.

The HCUP Statistical Brief “Hospital Inpatient Utilization Related to Opioid Overuse Among Adults, 1993–2012,” published in August 2014, found that the rate of hospitalizations for overuse of pain medications increased

more than 150 percent since 1993. Hospitalization rates climbed among every adult age group and in every region of the country, making the problem more uniformly widespread than was previously observed.

In addition, AHRQ's HCUP online query system offers users the ability to generate county- and region-level statistics from 32 HCUP participating States on hospital stays that involve alcohol, opioids, and other drugs for 2013 and 2014 to illustrate how the impact of substance use has varied widely across communities. For example, a

data query shows that Owsley County, KY, had the highest overall hospitalization rate for substances: 3,525 hospital stays per 100,000 people. Conversely, Ringgold County, IA, had the lowest rate: 220 stays per 100,000 people. Through HCUPnet's tables, graphs, and maps, community-level information can inform local health policy and improvements in the health care system.

More Information

For more information on AHRQ's work to address the opioid epidemic, visit <https://www.ahrq.gov/opioids>.

