



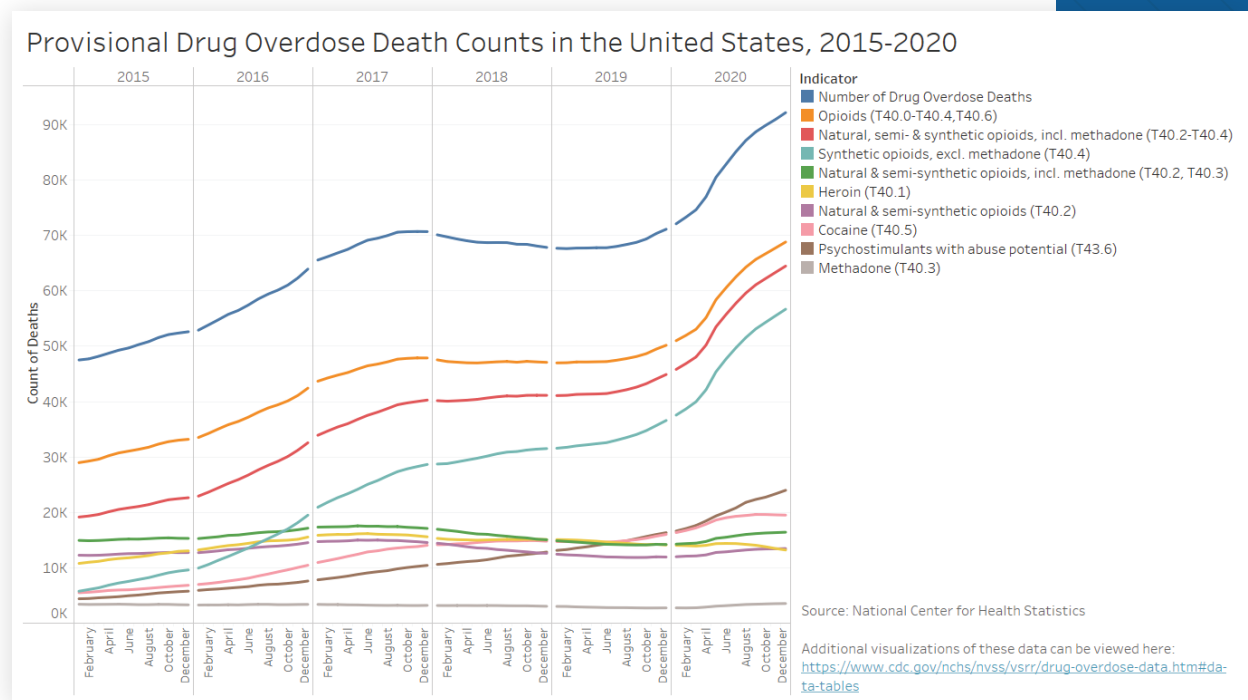
Opioid Overdoses
Accelerate 30% During
Pandemic: **Primary Care
Clinics Are Integral
to the Solution**

Executive Summary

Nearly 500,000 overdose deaths between 1999 and 2019 were linked to opioids. Since the onset of the COVID-19 pandemic, overdoses have accelerated by 30%, increasing the burden to the American healthcare system and trauma to those affected by opioid addiction. The Six Building Blocks Program, authored by a physician-led team from the University of Washington Department of Family Medicine and the Kaiser Permanente Washington Health Research Institute, is an evidence-based approach to opioid management targeting chronic-pain patients on long-term opioid therapy. It serves as a roadmap for primary care clinics and practitioners and includes proven processes and tools to effectively manage long-term opioid therapy patients and reduce the risk of opioid overdose and death, potentially saving many lives.

The following paper provides foundational information about the ongoing and growing opioid problem, discusses the Six Building Blocks Program, and introduces facilitators who are experts in rural healthcare and skilled at incorporating the Six Building Blocks Program into daily operations at primary care practices and clinics, with the goal of creating long-term change and success..

In 2019, nearly 50,000 people in the U.S. died from overdoses involving opioids, more than a six-fold increase from 1999¹ and accounting for over 70% of all overdose deaths.² In 2020, drug overdose deaths rose to a record 93,000 – an almost 30% increase from the previous year³ – with opioids contributing to close to 70,000 of those deaths.⁴



During the onset of the COVID-19 pandemic, focus shifted to addressing the rising number of COVID-19 cases, and access to services such as behavioral health and opioid management was significantly reduced. As we mark nearly two years with the COVID-19 pandemic, the healthcare system has an opportunity to reprioritize its efforts to support at-risk populations for opioid use disorder and overdose. Given that nearly half of all dispensed opioid prescriptions originate from primary care clinics and practices, primary care is at the center of both the problem and the solution.⁵

¹<https://www.cdc.gov/opioids/data/analysis-resources.html>

²<https://www.cdc.gov/opioids/data/index.html>

³<https://www.nytimes.com/interactive/2021/07/14/upshot/drug-overdose-deaths.html?action=click&module=Top%20Stories&pgtype=Homepage>

⁴https://www.beckershospitalreview.com/opioids/terrifying-2020-drug-overdoses-jump-30-hit-record-93-000-deaths.html?utm_campaign=bhr&utm_source=website&utm_content=latestarticles

⁵<https://pubmed.ncbi.nlm.nih.gov/25896191/>

Primary care practices and clinics urgently need a roadmap to improve opioid management of chronic pain patients and to reduce reliance on long-term opioid therapy as the primary treatment modality for this patient population. The Six Building Blocks Program equips primary care providers with alternative solutions to treat and manage patients with chronic pain. The program was developed by the University of Washington Department of Family Medicine and Kaiser Permanente Washington Health Research Institute and is a long-term approach that defines consistent, effective and guideline-driven processes and tools that can help mitigate the opioid overdose epidemic.

The History of the Crisis: How We Got Here

According to the CDC⁶, the opioid crisis caused nearly 500,000 overdose deaths between 1999 and 2019. It can be divided into three waves as follows:

Starting in the 1990s

Increased number of opioid prescriptions, leading to a rise in overdose deaths involving prescription opioids (natural and semi-synthetic opioids and methadone) since at least 1999.

Starting in 2010

Rapid growth of overdose deaths involving heroin.

Starting in 2013

Major increases in overdose deaths involving synthetic opioids, especially illicitly manufactured fentanyl.

⁶<https://www.cdc.gov/opioids/data/analysis-resources.html>

Multiple overlapping factors, including misinformation, over-prescribing, and profit, have fueled the opioid epidemic over the years. According to the National Institute on Drug Abuse⁷:



In the late 1990s, pharmaceutical companies reassured the medical community that patients would not become addicted to prescription opioid pain relievers, and healthcare providers began to prescribe them at greater rates. This subsequently led to widespread diversion and misuse of these medications before it became clear that these medications could indeed be highly addictive.



The pharmaceutical industry flooded the country with opioids, shipping 76 billion oxycodone and hydrocodone pills between 2006 and 2012.⁸ Failure to regulate or standardize opioid production, distribution, and prescribing has led to a rise in drug addiction and overdose. Opioids are among the top prescribed medications in the United States, even though the evidence base for use of opioids long-term is sparse, and there is evidence that alternative, nonopioid medications can be as effective as opioid medications in treating acute pain.⁹

The Impact of Inconsistent Prescribing Patterns

Prescribing rates vary significantly from state to state and clinician to clinician, and these differences accelerated the crisis. The overall U.S. prescribing rate was 46.7 prescriptions per 100 people in 2019, with a low of 30.3 in Hawaii and a high of 85.8 in Alabama according to CDC data.¹⁰

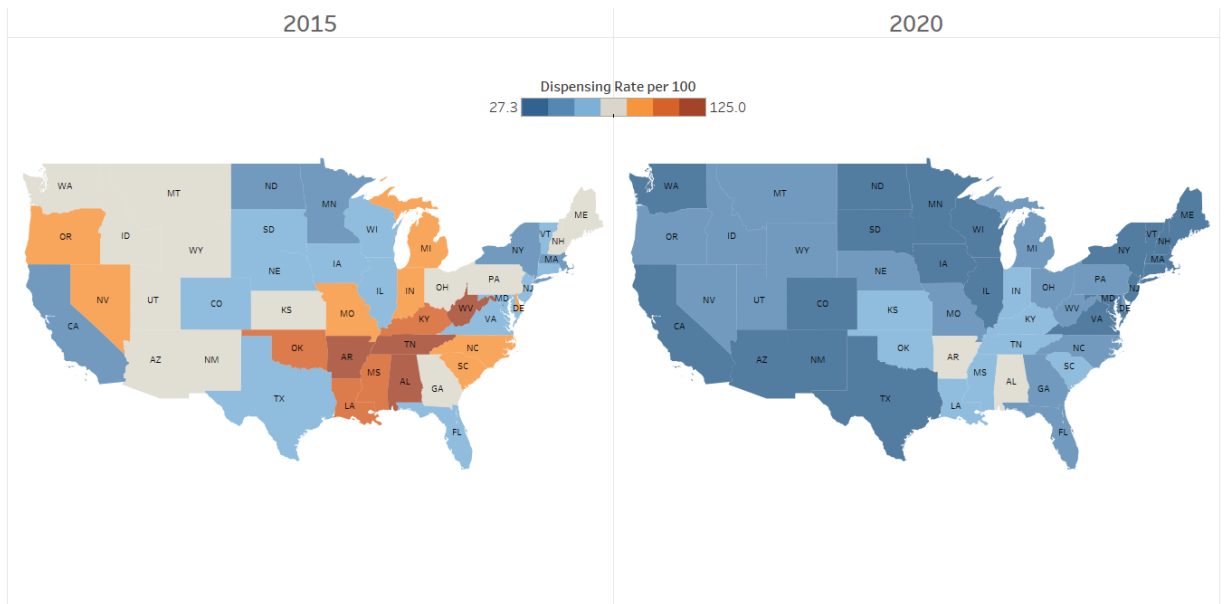
⁷<https://www.drugabuse.gov/drug-topics/opioids/opioid-overdose-crisis>

⁸https://www.washingtonpost.com/investigations/an-onslaught-of-pills-hundreds-of-thousands-of-deaths-who-is-accountable/2019/07/20/8d85e650-aafc-11e9-86dd-d7f0e60391e9_story.html

⁹<https://www.ahrq.gov/sites/default/files/wysiwyg/professionals/prevention-chronic-care/resources/6bb-guide-introduction.pdf>

¹⁰<https://www.cdc.gov/drugoverdose/rxrate-maps/county2019.html>

Opioid Dispensing Rate per 100, 2015 vs. 2020



Source: Centers for Disease Control <https://www.cdc.gov/drugoverdose/maps/rxrate-maps.html>

Although the national opioid prescribing rate plateaued between 2010 and 2012 and has declined, the number of opioids prescribed in morphine milligram equivalents (MME) per person is still approximately three times higher than it was in 1999,¹¹ increasing the risk of patient overdose and death.

Opioid (doses in mg/day except where noted)	Conversion Factor
Codeine	0.15
Fentanyl transdermal (in mcg/hr)	2.4
Hydrocodone	1
Hydromorphone	4
Methadone:	
1-20 mg/day	4
21-40 mg/day	8
41-60 mg/day	10
>=61-80 mg/day	12
Morphine	1
Oxycodone	1.5
Oxymorphone	3

¹¹<https://www.cdc.gov/drugoverdose/deaths/prescription/practices.html>

Results of a study from Harvard T.H. Chan School of Public Health and Harvard Medical School show that patients treated by doctors who prescribe opioids more often are at greater risk for long-term opioid use, which increases their risk of misuse, addiction, or overdose.¹² Researchers emphasized the importance of educating clinicians on safe prescribing practices and reducing the discrepancies. The study found that:

- ✓ Patients treated by frequent opioid prescribers were three times as likely to receive an opioid prescription as patients who saw infrequent prescribers in the same hospital.
- ✓ Patients who saw the most frequent prescribers were 30% more likely to become long-term opioid users and to have an adverse outcome related to the drugs.
- ✓ Patients who saw infrequent prescribers were no more likely to return to the hospital, suggesting they were not undertreated.

Anyone who is prescribed opioids faces the risk of opioid misuse, addiction, and overdose. As many as one in four long-term opioid therapy patients treated in a primary care setting experiences opioid addiction.¹³

¹²<https://www.hsph.harvard.edu/news/press-releases/opioids-addiction-physicians/>

¹³<https://www.cdc.gov/opioids/basics/prescribed.html>

The Current State of Affairs: Lack of Consistent Adherence to Opioid Prescribing Guidelines

Over-prescribing of opioids continues to fuel the current crisis. The 2016 CDC *Guideline for Prescribing Opioids for Chronic Pain* provides recommendations to help primary care providers determine when to use opioids for chronic pain; how to manage dosage, duration, follow-up, and discontinuation; and how to assess risk and address harm.¹⁴ However, adherence to the CDC guideline is not widespread, and prescribing rates and preferences still vary greatly by location, facility, and provider.

Some factors that contribute to this variability in practice and prescribing patterns are:

Lack of medical training

U.S. medical schools offer a diverse range of topics, courses, teaching methods, assessment approaches, and faculty experience, yet historically, there has not been a standardized curriculum that covers ethics and practices for prescribing opioids, and because much of the information about overprescribing has emerged relatively recently, not all faculty members are prepared to teach about these topics.

In recent years, there has been a push for medical schools to improve opioid-related curricula. In 2016, students at Harvard Medical School organized their own training to bolster their knowledge of opioid addiction and treatment.¹⁵ The same year, the American Association of Medical Colleges (AAMC) issued a statement demonstrating medical schools' and teaching hospitals' commitment to opioid education and training; 74 schools signed the statement in the first few months, and many schools also signed a White House pledge to teach the CDC guidelines.¹⁶

¹⁴<https://www.cdc.gov/opioids/providers/prescribing/guideline.html>

¹⁵<https://www.statnews.com/2016/05/17/opioid-addiction-medical-schools/>

¹⁶<https://www.aamc.org/news-insights/medical-schools-confront-opioid-crisis-greater-focus-pain-addiction-education>

Over-prescribing patterns

The average number of days per prescription continues to increase, with an average of 18 days in 2017.¹⁷ In contrast, the CDC recommends prescribing no more than seven days of opioids for acute pain and 14 days for sub-acute pain.

How physicians prescribe opioids after surgery, as an example, is not consistent, and over-prescribing habits often become ingrained. A February 2021 survey of 56 residents and 57 faculty members at the University of Colorado School of Medicine Department of Surgery showed a broad range of prescription preferences. When asked how many oxycodone tablets they would prescribe for 14 common surgical procedures, faculty said they would prescribe more opioid tablets than suggested by Opioid Prescribing Engagement Network (OPEN) guidelines in five of the procedures, and residents said they would prescribe more in nine of the procedures.¹⁸ One reason providers may prescribe more than the recommended guidelines is patient satisfaction – they may worry that patients who run out of pain medicine, especially those who live in rural communities, will be less satisfied with their care.

Patients often do not understand the grave risks associated with prescription opioids and inherently trust medications prescribed by their physicians. However, data has shown that one in every 16 surgical patients will become a chronic opioid user even after minor surgery.¹⁹ A 2017 study from researchers at the University of Michigan Medical School, Ann Arbor, found that 6% of opioid-naive patients undergoing both minor and major surgeries continued to use opioids 90 days after their procedures – making prolonged opioid use the most common post-surgical complication.²⁰ Yet opioids are still a routine part of post-operative care, often prescribed in larger doses and for longer courses than recommended.

¹⁷<https://www.cdc.gov/drugoverdose/pdf/pubs/2018-cdc-drug-surveillance-report.pdf>

¹⁸<https://www.news-medical.net/news/20210708/Study-Opioid-prescribing-preferences-practices-among-surgical-residents-and-faculty-differ.aspx>

¹⁹<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6353661/#:~:text=Despite%20the%20high%20overall%20rates,after%20undergoing%20a%20surgical%20procedure.>

²⁰<https://pubmed.ncbi.nlm.nih.gov/28403427/>

The stakes are too high for this trend of overprescribing to continue. In 2019, 28% of overdose deaths involved prescription opioids, and on average, more than 38 Americans died each day from a prescription opioid overdose.²¹



The current epidemic of prescription opioid overdose and deaths may be the most significant iatrogenic epidemic in the recent history of medicine in the United States. Although the responsibility for initiation of opioids for chronic pain may be attributed to primary care clinicians to some degree, the sheer numbers of patients taking a prescription opioid medication for long-term chronic pain has placed an enormous burden on primary care, where the majority of opioid prescriptions are written. This burden may contribute to burnout and stress in primary care settings, where both prescribers and clinic support staff struggle daily to balance opioid therapy risks and the potential for abuse and diversion with empathy for the suffering of chronic pain patients.

As evidence accumulates to support more judicious use of chronic opioid therapy (COT), guidelines for prescribing opioids by the U.S. Center for Disease Control and Prevention continue to be modified and updated. The proper implementation of these recommendations will require changes to clinic systems and workflows of health care teams across the entire clinic, not just changes by individual prescribers.



A 2017 article about the development of the Six Building Blocks program, published in JABFM

²¹<https://www.cdc.gov/drugoverdose/deaths/prescription/maps.html>

Where We Go From Here: An Evidence-Based Approach to Opioid Management

The opioid crisis is a large and complex problem and requires a nuanced and multifaceted response. In 2016, a clinical research team at the University of Washington Department of Family Medicine and Kaiser Permanente Washington Health Research Institute developed the Six Building Blocks Program to address the crisis head-on by providing an evidence-based, guideline-driven opioid management process for primary care clinics managing chronic pain patients on long-term opioid therapy. The goal of the Six Building Blocks program is to support clinics in building their capacity to help patients with chronic pain maximize their functional status and quality of life with a treatment plan that minimizes risk to patients and their providers.²² The Six Building Blocks Program has been adopted nationally as a component of the implementation package for the 2016 CDC *Guideline for Prescribing Opioids for Chronic Pain*.

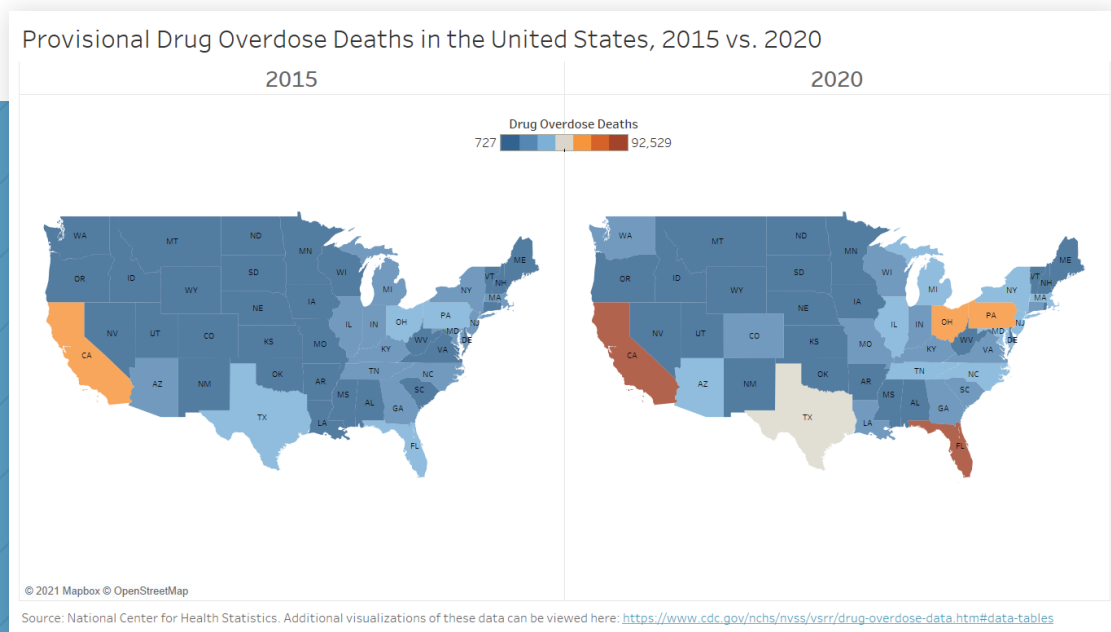
The Six Building Blocks focus on the following:

- 1 Demonstrating leadership support and building organization-wide consensus for more cautious opioid prescribing
- 2 Revising, aligning, and implementing clinic policies, patient agreements, and workflows
- 3 Tracking and monitoring all patients on long-term opioid therapy
- 4 Preparing and planning patient-centered clinic visits for patients on long-term opioid therapy
- 5 Identifying resources and caring for patients with complex needs
- 6 Measuring success and continuously monitoring progress and improvements

²²<https://www.ahrq.gov/sites/default/files/wysiwyg/professionals/prevention-chronic-care/resources/6bb-guide-introduction.pdf>

A clinician-led team at Stroudwater Associates worked closely with the University of Washington Department of Family Medicine and Kaiser Permanente Washington Health Research Institute to become practice facilitators of the Six Building Blocks Program.

As the national leader in rural healthcare consulting, Stroudwater Associates' clinical team is well-versed in how the opioid epidemic has uniquely affected rural communities. With the challenges rural communities face in accessing healthcare, including behavioral health resources and alternatives to opioids such as physical therapy to treat chronic pain, opioid prescribing patterns in rural counties are higher than the national average.



“

Overdose clusters have shifted from traditional centralized urban locations to adjacent and surrounding suburban and rural areas,” per a Program Manager from the Overdose Detection Mapping Application Program, which provides near real-time suspected overdose surveillance data to participating agencies.²³

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²³<https://www.npr.org/sections/coronavirus-live-updates/2020/08/13/901627189/u-s-sees-deadly-drug-overdose-spik-e-during-pandemic>

Stroudwater assists primary care clinics and practices to customize and incorporate the Six Building Blocks Program into their daily operations using the following strategies:

Evaluating current state

Review chronic pain and opioid therapy management policies and procedures, workflows, clinical protocols, staffing and infrastructure, roles and responsibilities within the clinics/practices.

Conducting interviews

Speak with practice and quality leadership and other key stakeholders, including physicians and providers.

Identifying and providing resources

Offer resources, such as template tools and forms, opioid management continuing education resources, etc. as needed.

Performing a gap analysis

Identify clinical operational gaps and performance improvement opportunities related to chronic pain and opioid therapy management and present recommendations to practice and quality leadership.

Facilitating virtual action planning sessions

Lead staff/leadership working sessions to determine priorities and develop an organizational Six Building Blocks Program Implementation Action Plan.

Educating and training

Conduct leadership, provider, and staff education and training regarding the Six Building Blocks program.

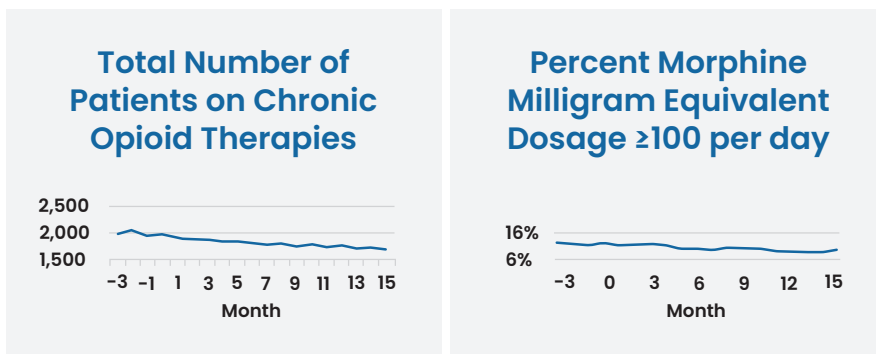
Providing ongoing support

Offer virtual implementation coaching and support to participating clinics and practices as mutually agreed.

Potential Benefits of Improving Long-Term Opioid Therapy Management

Communities that implement the Six Building Blocks Program in their primary care practices and clinics are seeing a decline in the number of patients being prescribed opioids for long-term chronic pain. Additionally, providers and staff feel less stressed knowing they have a systematic approach to managing patients on long-term opioid therapies.

During a clinical trial, 20 rural and rural-serving clinics in Eastern Washington and Central Idaho received external support for 15 months to implement the program. Implementation of the program resulted in fewer patients using chronic opioid therapies (COT) and fewer patients on high-dose opioids, reducing the risk of accidental overdose and death and potentially improving patients' functional status and quality of life.²⁴



²³<https://www.npr.org/sections/coronavirus-live-updates/2020/08/13/901627189/u-s-sees-deadly-drug-overdose-spike-during-pandemic>

Improving the management of long-term opioid therapy offers several other important quantitative benefits to patients, providers, and payors, particularly in a value-based reimbursement environment. Examples include:

Reduced avoidable hospital readmissions and Emergency Department utilization, potentially reducing total cost of care

- ✓ A review of CMS 2018 Medicare Chronic Conditions data shows 50% of Medicare members with Drug Abuse/Substance Abuse diagnoses had 5+ other chronic conditions, driving healthcare utilization.
- ✓ The 2018 CDC data shows low prevalence but high ED utilization and inpatient readmission rates for Drug Abuse/Substance Abuse diagnoses compared to other common chronic conditions, such as depression and heart failure.

Potential for increased revenue opportunities

- ✓ Chronic Care Management (CCM) and Complex CCM Services
- ✓ Primary Care Providers may have the opportunity to offer Medicare-covered care management services to patients with Drug Abuse/Substance Abuse diagnoses, creating new revenue opportunities.

The Future of the Crisis

Combatting the opioid epidemic will require the healthcare industry and government to remain laser-focused on improving clinical training for physicians on the guidelines for opioid prescribing, expanding access to behavioral health and

addiction resources, and holding major pharmaceutical companies accountable for their part in the colossal expansion of opioids on the market.

There are reasons to remain hopeful, though. In August 2021, the nation resolved its largest opioid settlement.²⁵ While in many ways the settlement will absolve big pharma of much of its doing as the catalyst for the crisis, it will make public all of the measures that the country's three major drug distributors (McKesson, Cardinal Health, and AmerisourceBergen, along with Johnson & Johnson), took to profit from opioid prescriptions.²⁶ Perhaps most importantly, the settlement will provide communities, many of them rural, with the financial resources they desperately need to combat the ongoing crisis.

In addition, the current presidential administration announced in August 2021 its plan to "Build [Rural Health] Back Better," which includes \$85.8 million in funding to rural communities to address the opioid epidemic and substance abuse issues in rural America.²⁷ Funding to rural America will include 78 implementation grants that focus on opioid misuse prevention. The current administration also pledged to request \$165 million for the FY22 budget to address the opioid epidemic in hard-hit rural communities.

As primary care clinics and physicians look to the future of the crisis and how to fight it, this funding will be pivotal in implementing evidence-based guidelines, applying resources to address addiction, and increasing access to much-needed behavioral health resources in these communities.

To learn more about how your clinics and primary care practices can implement the Six Building Blocks Program, connect with Stroudwater Associates.

²⁵<https://www.nytimes.com/2021/08/08/opinion/opioid-epidemic-sacklers-settlement.html>

²⁶<https://www.beckershospitalreview.com/opioids/pharma-companies-reach-26b-civil-opioid-settlement.html>

²⁷<https://www.whitehouse.gov/briefing-room/statements-releases/2021/08/13/fact-sheet-biden-administration-takes-steps-to-address-covid-19-in-rural-america-and-build-rural-health-back-better/>

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⁶<https://www.cdc.gov/opioids/basics/epidemic.html>

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⁸https://www.washingtonpost.com/investigations/an-onslaught-of-pills-hundreds-of-thousands-of-deaths-who-is-accountable/2019/07/20/8d85e650-aafc-11e9-86dd-d7f0e60391e9_story.html

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¹³<https://www.cdc.gov/opioids/basics/prescribed.html>

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¹⁵<https://www.statnews.com/2016/05/17/opioid-addiction-medical-schools/>

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²⁵<https://www.nytimes.com/2021/08/08/opinion/opioid-epidemic-sacklers-settlement.html>

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