

The Opioid Epidemic in Texas: Current Policies and Possible Policy Reforms



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A report written by the Hobby School of
Public Affairs at the University of
Houston in support of the Texas House
Select Committee on Opioids and
Substance Abuse

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EXECUTIVE SUMMARY

To address the opioid addiction problem in Texas, Speaker Joe Straus, Texas House of Representatives, created the *House Select Committee on Opioids and Substance Abuse* and charged it with developing legislative solutions for addressing the scourge of opioids in Texas.

This report is written in support of the Select Committee's important work. The Report focuses on possible legislative actions in the areas of *Prevention*, *Treatment*, and *Harm Reduction*.

In each of these areas, Texas laws and policies are discussed, the laws and policies of other states are surveyed, and recommendations are put forward for the Committee's consideration. The recommendations are based on available research and a review of policies and proposed policies in other states.

In the area of *Prevention*, the report includes a number of specific recommendations for the Committee's consideration. These include, but are not limited to:

- Improve data collection on overdose deaths, opioids use disorders, and treatments for substance use disorders in Texas.
- Enhance reporting by and expand access to the Texas prescription drug monitoring program.
- Augment prescriber education about opioids and pain management through Continuing Medical Education programs and medical school coursework.
- Improve prescriber guidelines including (with appropriate exceptions) limiting first-time opioid prescriptions.
- Expand patient education to ensure they are provided with information about their risks of opioid addiction and overdose.
- Develop school-based health curricula to help students understand the dangers of opioids and increase the use of screenings in school through Screening, Brief Intervention, and Referral to Treatment (SBIRT) or other programs to identify students at risk for opioid misuse.
- Consider enhancing sentencing penalties for the trafficking of Fentanyl and its analogues.

Many Texans and their families are currently suffering from opioid use disorder and its consequences. The risk of relapse for opioid use disorder is very high for a very long time. The Report suggests consideration of the following recommendations (among others) with respect to improving Treatment:

- Increase screenings for opioid use disorder among primary care physicians and other front-line providers.
- Expand insurance coverage for evidence-based medication-assisted treatment through Medicaid and other programs.
- Increase the number of opioid use disorder programs across the state offering Medicated-Assisted Treatment (MAT) with attention to geographical distribution.
- Increase the number of medical providers across the state with buprenorphine waivers, with attention to geographical distribution.
- Require all state-licensed addiction treatment programs that admit patients with opioid-use disorders to provide access to MAT.
- Direct health systems and hospitals to facilitate access to MAT for overdose victims while in the Emergency Room (ER).
- Support and expand drug courts across the state, with attention to geographical distribution.
- Direct drug courts to increase supervision of participants within the first 30 days of supervision by increasing the number of random drug tests and interactions with recovery coaches or others.
- Require drug courts to include access to evidence-based medication-assisted treatments for patients with opioid use disorder.
- Expand access to MAT throughout the criminal justice system, including arranging MAT for inmates in residential treatment.

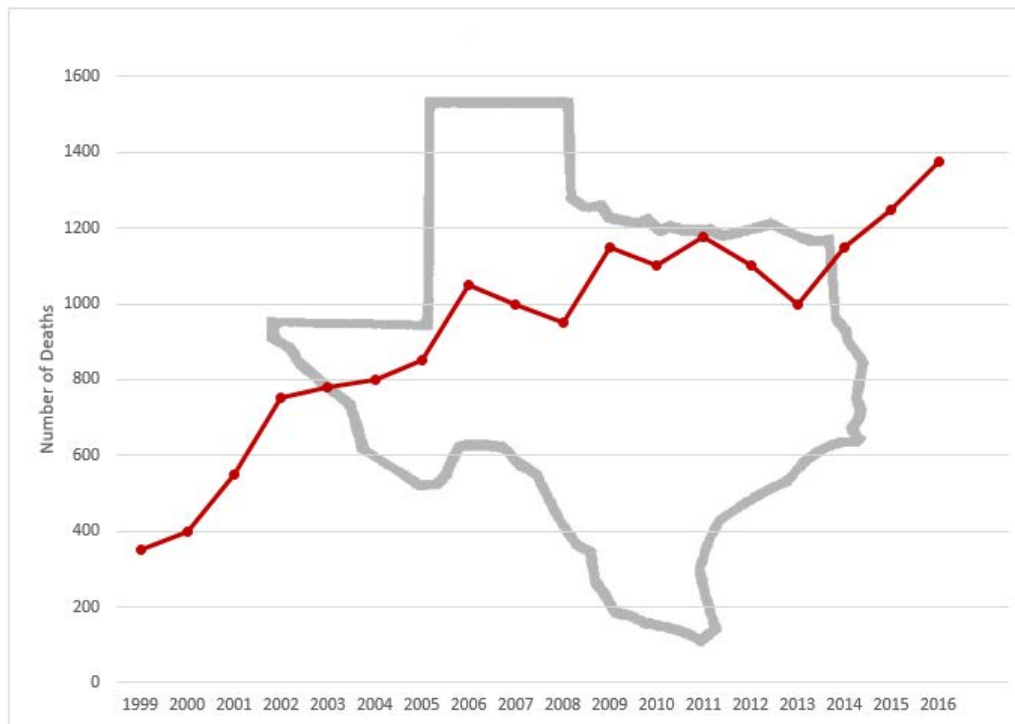
As is obvious, many of our citizens are deeply affected by opioid use. Harm Reduction attends to the worst consequences of opioid use disorder and offers strategies for mitigating them. They are no one's first choice, but can reduce deaths and some of the public health risks associated with opioid use. The Report discusses the following:

- Appropriately expand access to the opioid antagonist Naloxone (Narcan). Equip all first responders with Naloxone and train them in its use. Encourage Naloxone distribution to patients (or family and friends) on long term opioid therapy or undergoing MAT, along with training in its use. Provide relevant education to prescribers, pharmacists, and social workers.
- Enact a "Good Samaritan" law and monitor its effectiveness and possible unintended consequences. Such a law would enable an individual in the company of an overdose victim to avoid arrest if they call 911 and stay with the person, even if they were involved in substance abuse with that person.
- Establish a pilot program for the distribution of Fentanyl test kits and study its effectiveness. Fentanyl is ferociously deadly in nearly minute amounts (See Figure 15); other substances are now being laced with it. A harm-reduction program would allow street testing of substances via test strips that check for Fentanyl.

INTRODUCTION

The misuse of opioids, including prescription opioids, heroin, and fentanyl, has reached epidemic proportions in the United States, resulting in more than 42,000 overdose deaths in 2016. In Texas, the number of opioid overdose deaths has more than quadrupled since 1999 (see Figure 1). The state ranked 12th in the country in the number of opioid-related overdose deaths in 2016 with 1,375, and second in the country for total health care costs from opioid misuse at nearly \$2 billion per year.¹ Amarillo, Longview, Odessa, and Texarkana all rank among the top 20 cities in the US for opioid misuse.² Moreover, trends in heroin use in Texas point to worsening problems in coming years.³

Figure 1: Number of Opioid Related Overdose Deaths in Texas



In order to address the opioid problem in Texas, the Speaker of the Texas House of Representatives Joe Straus created the House Select Committee on Opioids and Substance Abuse and charged it with developing and presenting legislative solutions for addressing the scourge of opioids in Texas. This report has been written in support of the Select Committee’s important work.

The report is organized as follows. After briefly discussing the causes and consequences of the opioid epidemic, it outlines possible legislative solutions in three main categories: 1. Prevention; 2. Treatment; and 3. Harm Reduction. In each of these areas, Texas laws and policies are discussed, the laws, policies, and policy proposals of other states are surveyed, and recommendations are put forward for the Committee’s consideration. Appendix 1 includes a summary of the recommended strategies for tackling the opioid epidemic from 10 other states: Arizona, California, Massachusetts, Minnesota, Mississippi, New Mexico, New York, Vermont, Washington, and Wisconsin.

The recommendations put forth in this report represent only possible reforms based on available research and existing or proposed policies in other states. The authors of this report do not mean to suggest that all these recommendations should be implemented, or even that all of them are right for Texas. That is a matter for the people’s representatives to decide.

BACKGROUND

The current opioid epidemic is generally understood to have originated in the excessive prescribing of opioid-based pain medications in the late 1990s and early 2000s. The reasons for the sudden increase in opioid prescriptions during this period are complex and have been attributed to a number of factors, including

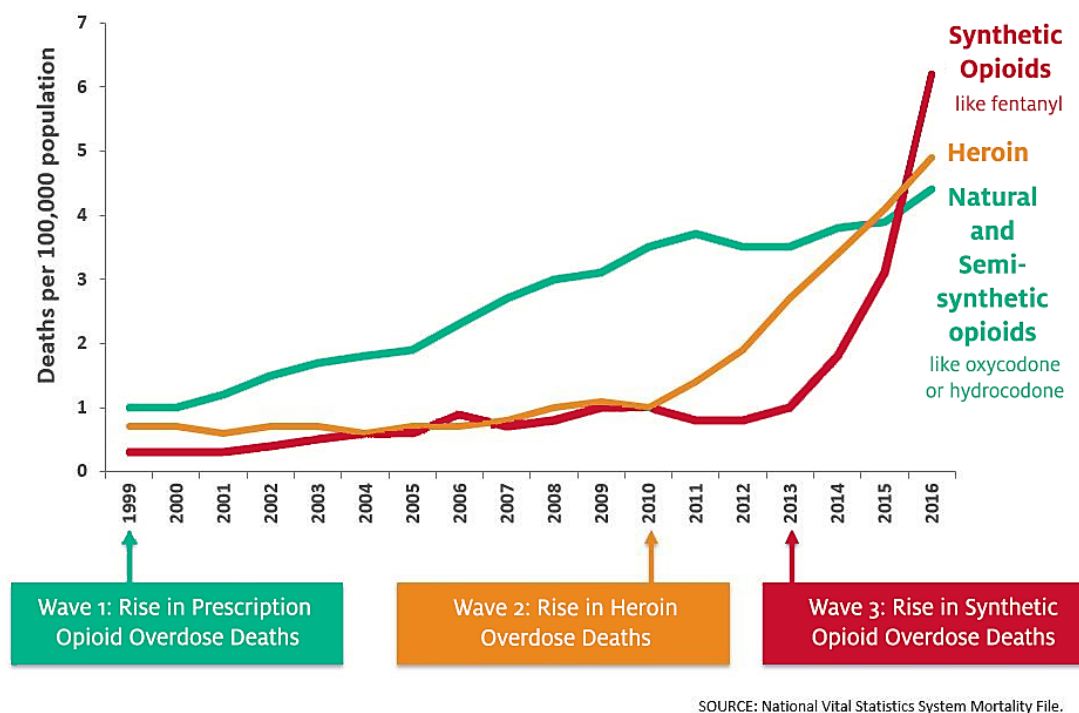
- widely distributed but poorly supported medical research suggesting that prescription opioids were non-addictive and effective for treating long-term pain;
- advocacy for increased pain treatments for patients including campaigns by groups such as the American Pain Society to designate pain as the “fifth vital sign” of health;
- aggressive promotion by pharmaceutical companies of OxyContin and other opioids as non-addictive pain treatments;
- rogue doctors and pharmacies who established “pill mills” to sell large quantities of prescription opioids which were often used for non-medical purposes;
- inadequate government oversight of opioid prescriptions and a lack of physician and patient education about the risks of opioid addiction and overdose.⁴

Any one of these factors by itself might not have caused a major problem, but together they resulted in a huge increase in opioid consumption. Sales of prescription opioids in the U.S. nearly quadrupled from 1999 to 2014.⁵ In 2016, 91.8 million (34.1%) or more than one-third of U.S. civilian, noninstitutionalized adults used prescription opioids, and 11.5 million (4.3%) misused them.⁶ The United States today accounts for less than 5% of the world's population but over 80% of the world's consumption of opioid pain relievers.⁷

The over-prescription of legal opioids still might have been manageable had it not been for other factors. Unfortunately, during the same years when opioid prescriptions were increasing, heroin was becoming cheaper and more accessible throughout the US.⁸ By 2010, as prescription drugs began to come under tighter scrutiny, many individuals who had developed prescription opioid use disorders turned to heroin. Approximately 80% of current

heroin users report that their opioid use began with prescription opioids.⁹ Increased heroin use rapidly led to higher rates of addiction and overdose deaths related to opioids. The recent rise in the sale and use of synthetic opioids such as fentanyl (which can be 50 times more powerful than heroin but is often mixed with it) has further led to a spike in overdose deaths (See Figure 2).

Figure 2: Three Waves of the Rise in Opioid Overdose Deaths in the United States



Source: CDC.¹⁰

Understanding the causes of the opioid epidemic helps to explain why a multi-pronged strategy is necessary for addressing it. Prevention is obviously important. Existing policies must be expanded and new ones developed for preventing individuals from misusing prescription or non-prescription (heroin) opioids in the first place.

The treatment of opioid use disorder is also essential. A common story of opioid use disorder begins with a high school football player or gymnast who becomes addicted to prescription opioids after suffering an injury, or a construction worker who becomes addicted after being prescribed opioids after a work injury, and then progresses to heroin use after his or her prescription is cut off.¹¹ Hospitals, emergency rooms, and physicians must not simply discontinue opioid prescriptions without providing appropriate continuing care, including pain management consultation and medication-assisted treatment if necessary, because individuals who are rapidly discontinued from prescribed opioids are at very high risk for initiating heroin, which increases risk of overdose.

The third prong of any complete strategy for combatting opioid misuse is the reduction of overdose deaths and other harms. The pain of losing a loved-one to an opioid overdose, suicide, or opioid-related accidental death is unmeasurable. The trauma of living with someone (a child or sister, for example) with opioid use disorder can

nonetheless be equally painful - albeit in different ways. Children are meanwhile now entering foster care at record rates due in part to opioid misuse by their parents. Where opioid misuse cannot be prevented or effectively treated, the best strategy (at least until treatment and recovery are a realistic possibility) is harm reduction.

Prevention, Treatment, and Harm Reduction are the three pillars around which the recommendations in this report are built. While none is sufficient by itself, together they can counteract the multiple causes of the opioid epidemic, forestall the development of future opioid-use disorders, and provide those individuals already in the grip of opioid misuse with a real chance at recovery.

PREVENTION

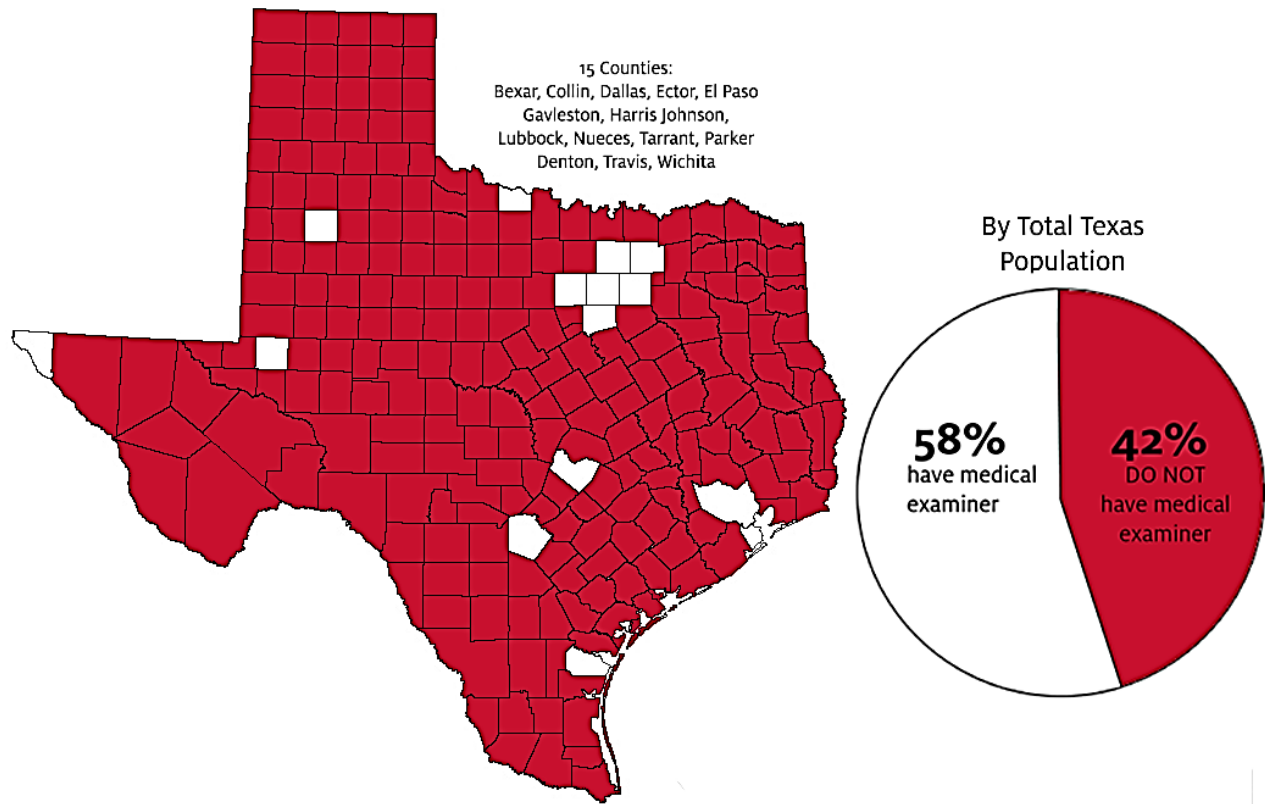
The first and most important step for addressing the opioid crisis in Texas is preventing the further misuse of opioids. Opioid use disorder is typically chronic, life-long, difficult to treat, and associated with high rates of morbidity and mortality.¹² Thus, emphasis must be given to preventing new cases of opioid use disorder from developing. A number of strategies exist toward this end.

I. The Need for Better Data

The scope of the opioid crisis in Texas remains unclear. Although opioid misuse appears on average low in the state as a whole, it is high in some areas and among some populations. There is also good reason to believe opioid overdose deaths and treatment for opioid use disorders are not being accurately counted and reported. One important step toward more effectively addressing opioid use disorder in Texas is more accurate information about the nature of the problem.

One significant problem with opioid data collection in Texas relates to the reporting of overdose deaths. Only 15 out of Texas's 254 counties have a medical examiner who can perform an autopsy on deceased persons (See Figure 3). In the remaining counties, an elected justice of the peace fills out the death certificate. Because most justices of the peace have no medical training, and state law does not require them to order an autopsy or toxicology report, some – and perhaps many – overdose deaths in counties without medical examiners may be misattributed to heart failure or other causes.¹³ The Texas Health and Human Services Commission (HHSC) is currently working on a report based on a survey of justices of the peace on barriers to drug-related death reporting. Department of State Health Services is also writing a report on potential improvements to cause of death data based on death certificates.

Figure 3: Texas Counties without a Medical Examiner



Source: <https://www.county.org/about-texas-counties/county-data/Documents/MedicalExaminer.pdf>

Source: *The Daily Texan*.¹⁴

Texas also underreports the number of people entering treatment for opioid and other substance use disorders. The HHSC currently reports only clients they pay for as receiving substance use disorder treatments and excludes persons entering their services whose care has been paid by the county or city.¹⁵ Because Health and Human Services (HHSC) does not count the full numbers of individuals seeking substance abuse disorder treatments, it underreports this number to Substance Abuse and Mental Health Services Administration (SAMHSA) which determines federal funding for treatment in Texas. Texas therefore may not be receiving the money it should be allocated for treatment services. The HHSC's reporting may be based on an older interpretation of Health Insurance Portability and Accountability Act (HIPAA) that SAMHSA no longer endorses. Some researchers also report difficulty getting data on substance use disorders and treatments from HHSC.

The Centers for Disease Control and Prevention (CDC) also has two programs that provide states with resources for improving data collection on opioids:¹⁶

- 1) Data-Driven Prevention Initiative (DDPI): DDPI funds 13 states and Washington, D.C. to improve data collection and statistical analysis around opioid misuse, abuse, and overdose; develop strategies that impact abusive behaviors; and develop better opioid overdose prevention programs.
- 2) Enhanced State Opioid Overdose Surveillance (ESOOS): The ESOOS program funds 32 states and Washington, D.C. for more timely and comprehensive nonfatal and fatal overdose data, including funding

for improved comprehensive toxicological testing to identify emerging drug threats in opioid-involved fatal overdoses.

Texas currently does not receive funding from either of these programs

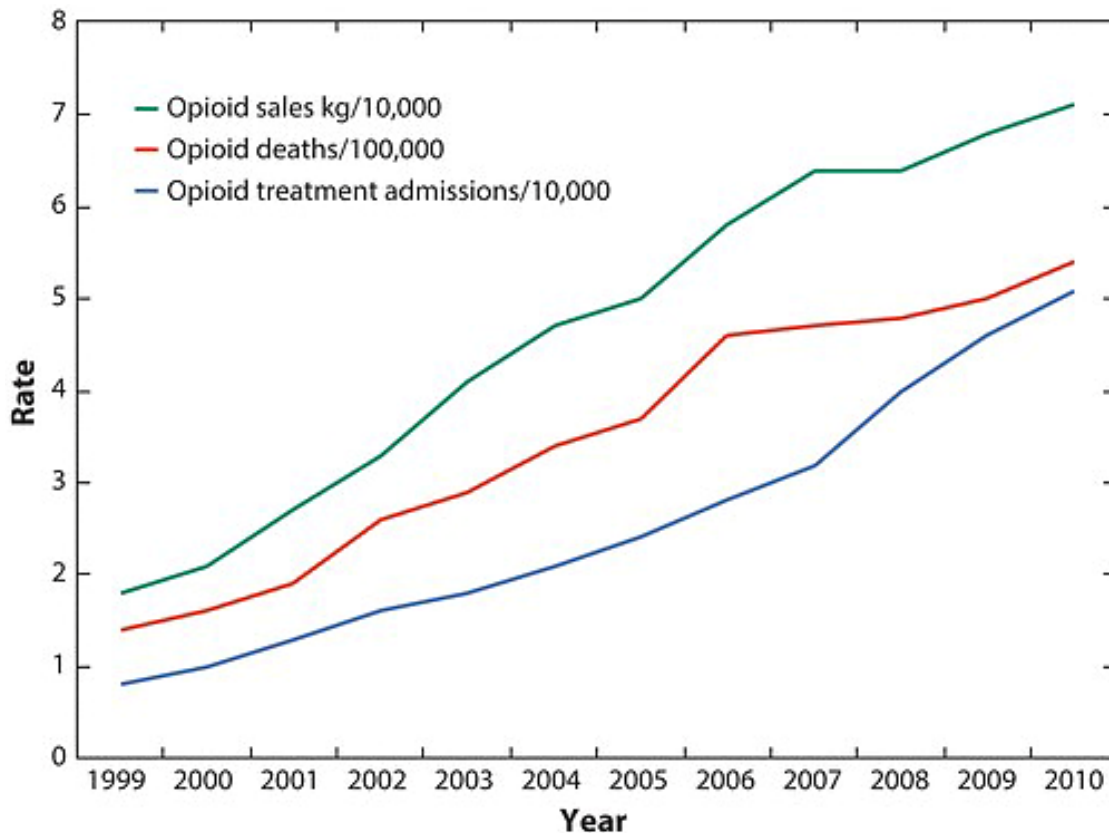
Recommendations

- Improve data collection on overdose deaths from justices of the peace based on forthcoming HHSC and DSHS reports.
- Develop standard guidelines for justices of the peace on when to order an autopsy to determine cause of death.
- Ask HHSC to review its reporting methods on persons entering treatment for opioids and other substance use disorders and direct it to submit complete treatment data, regardless of payment source, to SAMHSA.
- Direct HHSC to make de-identified data on substance use disorders and treatments more accessible to researchers so that they can better document and provide insight into the magnitude of the opioid and substance use problem in Texas.
- Create a public health database and direct insurers, hospitals, health systems, and other relevant units to enter data on opioid use disorders and overdoses in Texas into it.
- Apply for CDC funds to improve data collection and analysis on opioid misuse.

II. Prescription Drug Monitoring Program

Opioid overdose deaths and admissions for treatments for opioid use disorder have risen in tandem with opioid prescriptions and sales since the late 1990s (see Figure 4). As opioid sales quadrupled between 1999 and 2010, there was a parallel four-fold increase in overdose death rates and six-fold increase in treatment admissions for opioid use disorders.¹⁷ Since most people who misuse opioids begin with prescription opioid medications, a decrease in prescriptions for opioids and sales should help to decrease opioid overdose deaths and opioid use disorder.

Figure 4: Opioid Sales, Opioid Deaths and Opioid Use Disorder Treatment Admissions in the United States, 1999-2010



SOURCE: Kolodny et al., 2015.¹⁸

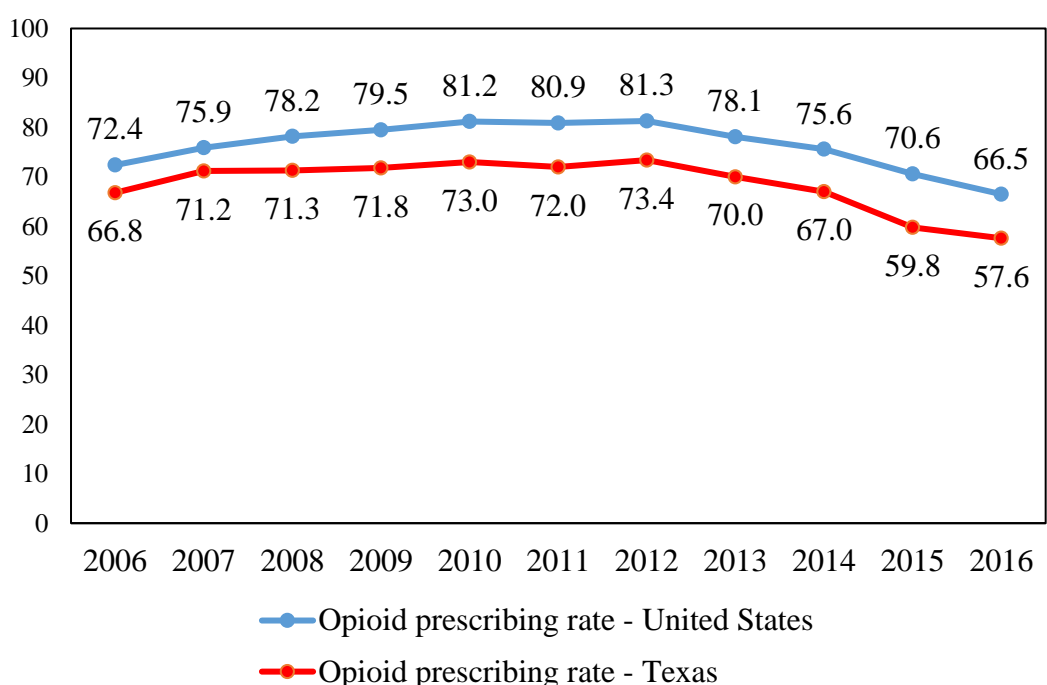
Prescription drug monitoring programs (PMPs) represent one important strategy for limiting unnecessary or excessive opioid prescriptions. PMPs collect information about controlled substance prescriptions from prescribers (doctors, dentists) and dispensers (pharmacists) and enter them into an electronic database that health care professionals can use to review a patient's controlled substance prescription history and ensure safe-prescribing practices. PMPs can also be used to enable regulatory and criminal justice agencies to identify and investigate potentially improper prescribing or dispensing patterns.

The Texas Prescription Monitoring Program (PMP) has existed in some form since 1982 and as an online, electronic database since 2012. In 2016, it was transferred from the Texas Department of Public Safety to the Texas State Board of Pharmacy. The Texas PMP collects and monitors prescription data for all Schedule II, III, IV, and V controlled substances dispensed by a pharmacy in Texas or to a Texas resident from a pharmacy located in select other states.

In 2009, Texas legislators passed a “pill mill” law to address the high number of pain management clinics in the state that were prescribing large quantities of opioids and other controlled substances with minimal medical oversight. The law requires among other things that pain management clinics be certified by the Texas Medical Board and owned and operated by a licensed physician who is present at the clinic for at least one-third of operating hours.

Several studies have found a significant association between the existence of PMPs and lower opioid prescriptions and opioid-related morbidity and mortality.¹⁹ A study of the Texas pill mill law similarly found significant reductions in opioid dose, volume, prescriptions, and pills dispensed associated with it.²⁰ Opioid prescribing rates in Texas have been lower than that in the United States in general and have declined from a high of 73.4 prescriptions per 100 persons per year in 2012 to 57.6 prescriptions per 100 persons per year in 2016 (See Figure 5). This would seem to indicate that the Texas PMP and pill mill law have been effective in limiting the over-prescribing of opioids, though more data and more sophisticated analyses are needed to support this claim.

Figure 5: Opioid Prescribing Rates per 100 Persons per Year in the United States and Texas from 2006 to 2016



Data source: U.S. Centers for Disease Control and Prevention.²¹

Although most research suggests that PMPs can reduce the over-prescribing of opioids, some research has found little impact of these programs on overall drug overdose or prescription opioid overdose mortality rates.²² The discrepancy may be related to the diversity of state PMPs. Each state determines which agency houses the PMP; which controlled substances must be reported; which types of dispensers (e.g., pharmacies) are required to submit data; how often data are collected; who may access information in the PMP database (e.g., prescribers, dispensers, or law enforcement); the circumstances under which the information may (or must) be accessed; and what enforcement mechanisms are in place for noncompliance.²³ Some recent research suggests that programs with stricter requirements, including those that require doctors and pharmacists to access databases when prescribing opioids and those that require more frequent data reporting, are more effective.²⁴

Texas has already taken steps to tighten up its PMP in ways that are likely to make it more effective. As of September 1, 2017, Texas pharmacies are required to report all dispensed controlled substances records to the PMP no later than the next business day. Starting September 1, 2019, pharmacists and prescribers will be required to check the patient's PMP history before dispensing or prescribing opioids, benzodiazepines, barbiturates, or carisoprodol. Although pharmacists and prescribers will be required to check the PMP, there is limited guidance to help either group make a patient-specific decision about prescribing or dispensing a controlled substance medication. One option is a clinical decision support tool called "NarxCare" that can be supplied by the analytics group overseeing the Texas PMP data, Appriss Health. The Texas State Board of Pharmacy is currently seeking funding for "NarxCare" to be added to the Texas PMP to provide decision support at the time of prescribing and dispensing.

Since taking over the PMP database in 2016, the Texas State Board of Pharmacy has also taken steps to make it more user-friendly. This is important because one perennial problem with PMPs is their underutilization by pharmacists and physicians.²⁵ According to data from the Texas State Board of Pharmacy, the number of provider searches has risen in 2017 while the number of prescriptions dispensed for opioids and other monitored medications has declined slightly.²⁶

In a recent review of state PMPs, researchers from the Bloomberg School of Public Health at Johns Hopkins University identified six reforms that have proven effective for optimizing prescription drug monitoring programs.²⁷ Texas has already fully implemented two of these reforms, partially implemented two others, and has not implement the remaining two (See Table 1).

TABLE 1: Prescription Drug Monitoring Program Recommendations and Status in Texas

RECOMMENDATION	STATUS IN TEXAS
<p>1. Recommendation: Mandate prescriber PMP registration and use.</p> <p>Rationale: Mandatory PMP registration and use policies are associated with increased use, and most evidence suggests PMP use is associated with decreased opioid prescribing and adverse events.</p> <p>Current Status: Thirty states mandate PMP registration and 39 mandates that prescribers register and use PMPs in at least some clinical circumstances.</p>	<p>Implemented as of September 1, 2019.</p>
<p>2. Recommendation: Proactively use PMP data for education and enforcement: States should analyze their PMP data to identify: 1. High volume prescribers who deviate from standards of care for review; 2. Potential inappropriate or illegal activities; and 3. Inappropriate and/or illegal use for intervention. Primary recipients of PMP data reports should include prescribers, dispensers, professional licensing boards, law enforcement agencies, and state and community prevention and treatment programs.</p> <p>Rationale: Many PMPs underutilize their data and do not engage in proactive reporting.</p> <p>Current Status: Forty states engage in proactive data analysis and reporting as of September 2017. Only five states provide unsolicited reports to all four primary recipient groups: prescribers, dispensers, professional licensing boards, and law enforcement agencies. Twelve states participate in the Prescription Behavior Surveillance System.</p>	<p>Partially implemented: Texas sends both solicited reports to prescribers, dispensers, licensing boards, and law enforcement. It sends unsolicited reports to prescribers, dispensers, and licensing boards if a patient has met a threshold of having received 5 controlled substance prescriptions issued by 5 different prescribers dispensed at 5 different pharmacies in the prior month. It does not have the authority to send unsolicited reports to law enforcement. Texas is one of the twelve states in the Prescription Behavior Surveillance System.</p>
<p>3. Recommendation: Authorize third-party payers to access PMP data with a plan for appropriate use and proper protections: States should authorize - with proper patient protections - Medicaid, Medicare, the Veterans Administration, Department of Defense, Indian Health Service, workers' compensation carriers, and private third-party health care payers to access PMP data for their enrollees.</p> <p>Rationale: Access to PMP data can provide third-party payers with the ability to identify and contact prescribers whose prescribing practices expose enrollees to unnecessary risks; identify enrollees who are obtaining high-risk prescriptions, contact their prescribers, create prescription limitations, and monitor compliance thereafter; and identify pharmacies where dispensing may put enrollees at risk.</p> <p>Current Status: Thirty-six states and one territory authorize some combination of third-party payers to access PDMP data. Seven states provide access to Medicare and five states to commercial third-party payers. Washington State authorizes Medicaid and Workers Compensation to access the PMP data in bulk.</p>	<p>Not implemented.</p> <p>(A chart showing the various insurance entities to which state PMPs send solicited and unsolicited reports can be found in Appendix 2.)</p>
<p>4. Recommendation: Empower law enforcement and licensing boards for health professions to investigate high-risk prescribers and dispensers: States should direct their PMPs to proactively analyze data to promote best standards of patient care and safety associated with opioid prescribing. Where such analyses reveal possible misconduct, that information should be provided to licensing boards and law enforcement for review.</p> <p>Rationale: When questions about possible misconduct arise, licensing boards need access to PMP data to review possible misconduct, and when warranted, share that information with the relevant law enforcement authorities.</p> <p>Current Status: Forty-five states, Guam, and the District of Columbia permit their licensing boards to access PDMP data; 18 of the states send unsolicited reports to licensing boards. Twenty states proactively analyze and send unsolicited reports to law enforcement agencies, and 28 allow law enforcement to solicit reports.</p>	<p>Partially implemented: Texas sends solicited reports to law enforcement and licensing/regulatory agencies and unsolicited reports to licensing/regulatory agencies.</p>
<p>5. Recommendation: Improve integration of PMPs into electronic health records systems: Most PDMPs are largely web-based, standalone platforms requiring a separate workflow. This is inefficient and substantially decreases their utility and promise.</p> <p>Rationale: PMP use takes up to three times longer than other computer-based tasks, and the additional time and effort required is a large barrier to regular use. Incorporating PMPs into Electronic Health Records (EHR) systems has the potential to reduce this burden and increase use.</p> <p>Current Status: The Office of the National Coordinator for Health Information Technology, in coordination with SAMHSA and others, has been involved in trials to integrate PMPs into Electronic Health Records systems in a variety of settings, with generally positive results. Twenty-seven states offer one or more forms of PMP integration with Electronic Health Records and/ or health information exchanges.</p>	<p>Not implemented: Texas has no access via integration (Health Information Exchanges (HIE), Electronic Health Records (EHR), and Pharmacy Dispensing Systems (PDS) integration).</p>
<p>6. Recommendation: Establish or enhance PMP access across state lines.</p> <p>Rationale: In many areas of the US PMPs are of limited effectiveness if providers are unable to access information about prescriptions in neighboring states.</p> <p>Current Status: Forty-three states currently engage in interstate PMP interoperability and six are working toward it as of 2017.</p>	<p>Implemented.</p>

Along with limiting third-party access, the Texas PMP also limits researchers' access to prescription and utilization data – even de-identified data. As a result, they do not have access to the information they need (e.g., 5-digit ZIP code) to plan and implement educational or interventional strategies for patients and prescribers in Texas.

The Johns Hopkins report and Opioid Task Forces of various states also recommend mandating electronic prescribing of opioids. Electronic prescribing of opioids offers numerous advantages, including fewer dosing errors, reduced fraud, greater security, and enabling enhanced surveillance.²⁸ Although electronic prescribing is legal in all 50 states, as of September 2016, only one in five providers had health systems that enable electronic prescribing and fewer than 15 percent of transactions for prescriptions for controlled substances occur electronically.

PMPs do carry some potential risks. Although PMPs can promote informed and safe prescribing for patients and reduce overprescribing, they can also have a “chilling effect” on medical professionals' willingness to prescribe opioids for legitimate purposes and also generate some privacy concerns.²⁹ Any steps to expand or improve the Texas PMP should be taken with awareness of the possible dangers of these programs and appropriate protections should be provided.

Recommendations

- Allocate funding for Texas State Board of Pharmacy to provide the decision support needed by prescribers and pharmacists to make decisions on prescribing or dispensing of controlled substances, thus making more effective use of the Texas PMP.
- Send unsolicited reports of possible high-risk prescribers and dispensers to law enforcement and state licensing boards.
- Consider sending unsolicited reports to prescribers, dispensers, licensing boards, and law enforcement in cases where a patient has met a lower threshold of unusual prescription practices than the current standards (5 controlled substance prescriptions issued by 5 different prescribers dispensed at 5 different pharmacies in the prior month).
- Expand access to the PMP, with appropriate patient protections, to various third-party payers such as Medicaid, Medicare, Veterans Affairs, and Workers Compensation carriers as well as to researchers in Texas.
- Improve integration of Texas PMP into electronic health records systems.
- Require e-prescribing for drugs that have a high potential for abuse, such as opioids, to mitigate errors and fraudulent prescriptions.

III. Physician Education and Prescriber Guidelines

Prescription opioids can be valuable medications for treating cancer pain, pain at the end of life, short-term or acute pain, and some other conditions. Problems arise only when these medications are prescribed unnecessarily or excessively. PMPs can be useful for monitoring the prescribing and dispensing of opioids and to manage individuals with opioid use disorders who are receiving medication-assisted treatment. It is also important, however, to ensure that health care providers themselves have a good understanding of the proper uses and risks of prescription opioids.

Unfortunately, many health care providers do not understand the limitations of opioids as a pain medication or their risks. Unsubstantiated claims about prescription opioids that were popularized in the 1990s and early 2000s continue to affect clinicians' understanding of proper uses for these medications. Many prescribers are unaware, for example, that there are no high-quality, long-term clinical trials that have ever been conducted demonstrating the safety and efficacy of opioid pain medications.³⁰ Surveys of patients with chronic non-cancer pain who received long-term opioid pain medications have found, in turn, that most of these patients continued to experience significant chronic pain and dysfunction.³¹ Some studies have even found that long-term opioid use can actually increase sensitivity to pain.³² One recent study of opioids for long-term back, hip, or knee pain found them to be no better than non-opioid medications for treating pain.³³ Meanwhile, studies have found that anywhere between one-fourth and one-third of chronic pain patients treated with opioids develop an opioid use disorder.³⁴ The CDC therefore now warn clinicians to avoid prescribing opioids as first-line or routine therapy for chronic pain.

Although some medical providers are becoming more aware of the dangers associated with prescription opioids, there remains a need for prescriber education that explicitly corrects misperceptions about opioid safety and efficacy. If clinicians treating pain more often substituted non-opioid analgesics and non-pharmaceutical approaches for opioids, evidence suggests the incidence of opioid addiction would decline and outcomes for patients with chronic non-cancer pain would improve.³⁵ Several states, including Iowa, Kentucky, Massachusetts, Ohio, Tennessee, and Utah, have passed mandatory prescriber education legislation. In Massachusetts, the Governor and the Massachusetts Secretary of Health and Human Services invited the deans of the state's four medical schools to convene to develop a common educational strategy for teaching safe and effective opioid-prescribing practices. The medical schools have incorporated these recommendations into their curricula and have committed to assessing students' competence in these areas.³⁶

The CDC recently issued guidelines for prescribing opioids for chronic pain. The CDC Guidelines are considered the highest standard for a comprehensive, evidence-based approach to prescribing opioids for chronic non-cancer pain in primary care.³⁷ They include directing clinicians to try non-pharmacologic therapy and non-opioid pharmacologic therapy as the preferred first choice for chronic pain treatment, prescribing the lowest effective dosage of opioids when opioid pain medications are started, and evaluating the benefits and harms of opioid therapy on a regular basis when utilized.³⁸ The CDC guideline summary sheet is included in Appendix 3.

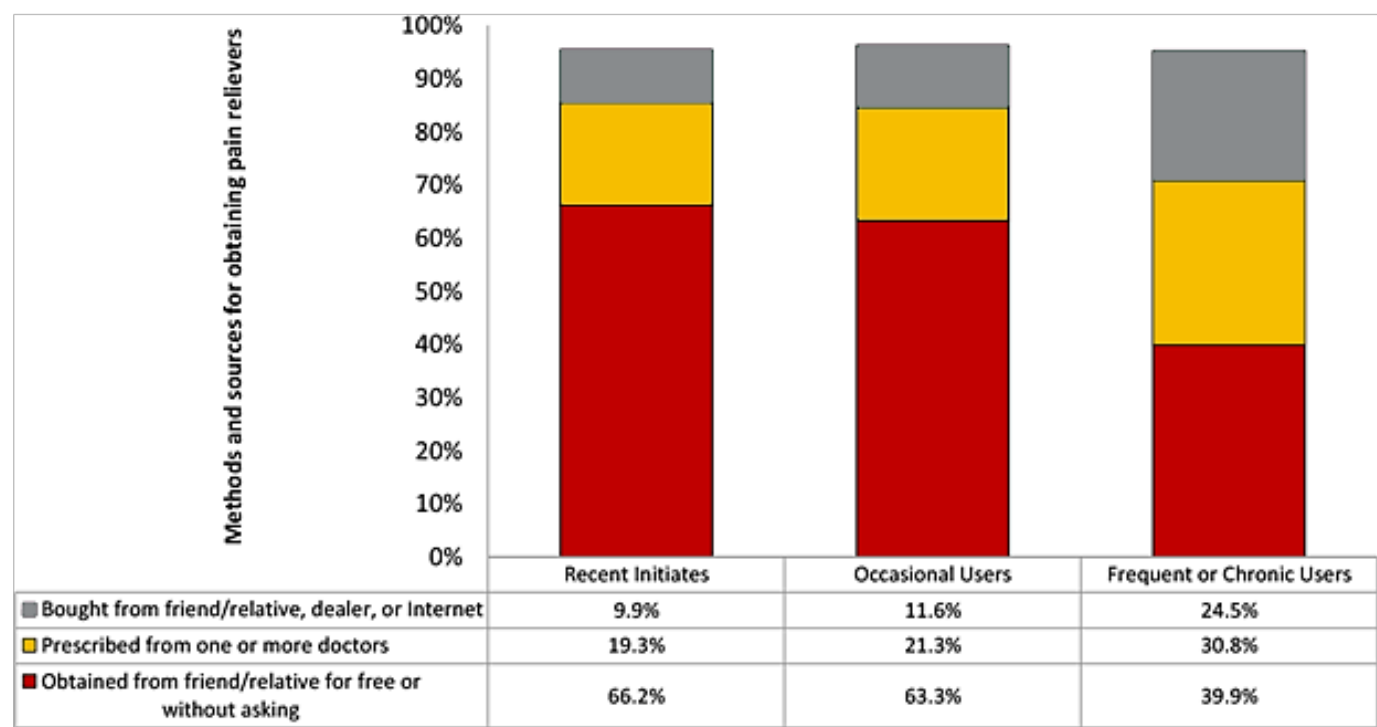
Recommendations

- Encourage medical professionals who prescribe opioids in Texas to follow the CDC Prescriber Guidelines for chronic pain treatment.
- Require at least three hours of opioid-related Continuing Medical Education (CME) for doctors who are licensed to prescribe opioids.
- Require medical and pharmacy students to receive three hours of opioid related coursework to ensure they are equipped with the most current information about evidence-based pain management. Medical and Pharmacy School Deans or other administrative stakeholders might be asked to develop appropriate courses or content for existing courses.

IV. Legal Limits on Opioid Prescriptions and Take Back Programs

Most prescription opioids that are misused are medications that are prescribed, dispensed, and then used for non-medical purposes by patients themselves or their friends or family members.³⁹ Roughly two-thirds of individuals who newly or occasionally use prescription opioids for non-medical purposes further report that they obtained them from friends or relatives for free or without asking (See Figure 6). The non-medical use of prescription opioids is, in turn, both a major source of addiction and overdose in itself and a gateway to heroin use. Eighty percent of new heroin users report starting with prescription opioids.⁴⁰ Reducing the supply of excess opioids in the population is therefore another important step toward reducing opioid use disorder.

Figure 6: Sources for Users Obtaining Pain Relievers



Source: 2014 National Survey on Drug Use and Health

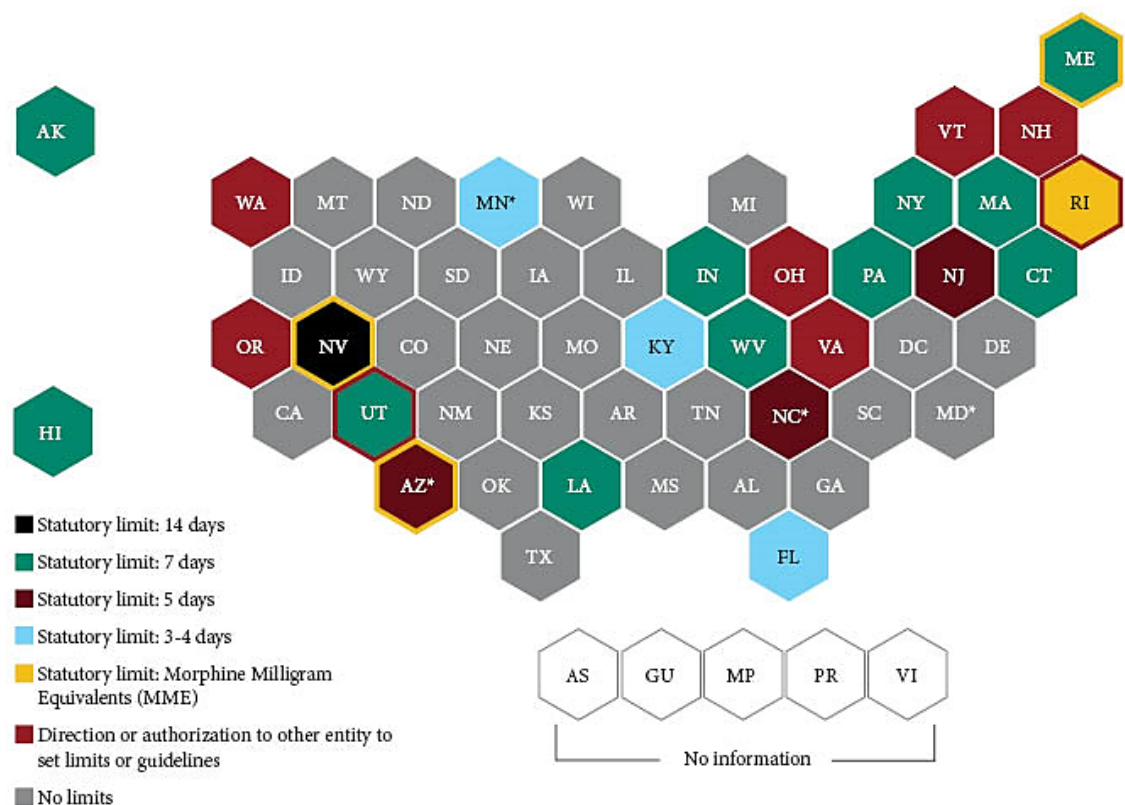
Source: U.S. Department of Justice Drug Enforcement Administration.⁴¹

Aside from prescription drug monitoring programs and prescriber education programs, there are two other important policy means for limiting the excess supply of prescription opioids in circulation in society: legal limits on opioid prescriptions and controlled substance take back programs.

The CDC recommends that if clinicians are going to prescribe opioids, they should prescribe the lowest effective dose and no greater quantity than is needed for the expected duration of pain. By their estimation, three days or less will often be sufficient and more than seven days will rarely be needed for the treatment of acute pain (see Appendix 3 for CDC guidelines). As of April 2018, 28 states had enacted some type of limit, guidance, or requirement related to opioid prescribing (See Figure 7).⁴² Most of this legislation limits first-time opioid prescriptions to a certain number of days — 7 days is most common, though some laws set limits at 3, 5, or 14 days. Physicians in Michigan, for example, are not allowed to prescribe more than a seven-day supply of opioid medication. Florida limits opioid prescriptions to three days unless strict criteria for medical appropriateness are met. Most states

specify exceptions for cancer, palliative care, and a few other conditions. A few states also set dosage limits (morphine milligram equivalents, or MMEs) usually recommending less than 90 MME/day for most patients with various exemptions. A few state laws direct or authorize other entities such as the state department of health or regulatory boards to set statutory opioid prescription limits. Texas currently has no duration/day limits or dosage limits on first-time opioid prescriptions.

Figure 7: State Opioid Prescription Limits



*Note: The map displays the state's primary opioid prescription limit and does include additional limits on certain providers or in certain settings. Arizona allows prescriptions up to 14 days following surgical procedures and North Carolina allows up to 7 days for post-operative relief. Maryland requires the "lowest effective dose." Minnesota's limit is for acute dental or ophthalmic pain. The map also does not reflect limits for minors that exist in at least eight states.

Source: NCSL.⁴³

Table 2 (below) provides a sample of several state laws regulating opioid prescriptions including day and dosage limits and exceptions. Day and dosage limits are intended to reduce the likelihood of an individual developing an addiction while increasing medical monitoring of prescription opioid use and reducing the potential excess supply of opioids available in society for non-medical use.

Table 2: State Prescribing Legislation

State and Bill Number (Year Enacted)	Number of Days or MME*	Limitations/ Requirements	Exceptions to Number of Days/MME						
			Chronic Pain	Cancer	Palliative Care	Hospice Care	Provider Judgment	SU D/ M AT **	Other
Arizona SB 1001a (2018)	5 days 14 days 90 MME/ days	•Initial prescription •Following surgical procedure •New prescription		x	x	x	X (MME exception only)	x	•Traumatic injury •Skilled nursing facility care •Burn Treatment •Infant being weaned off opioids at time of discharge (Day exceptions only) •Hospitalization (MME exceptions only)
Florida HB 21 (2018)	3 days	•Prescription for acute pain							•7-day supply permitted if medically necessary based on provider professional judgment •Definition of acute pain excludes: cancer, terminal conditions, traumatic injury, and palliative care •Exceptions in dispensing provisions allow for MAT
Kentucky HB 333 (2017)	3 days	•Initial prescription of Schedule II controlled substance for acute pain	X	X		X	X	X	•Inpatient setting •Major surgery or trauma •Determined by licensing board in consultation with state Office of Drug Control Policy
Louisiana HB 192 (2017)	7 days	•Initial prescription for adult for acute pain •Any prescription for minor	x	x	x		x	x	
Massachusetts HB 4056 (2016)	7 days	•Initial prescription for adult •Any prescription for minor	x	x	x		x	x	
Nevada AB 474 (2017)	14 days 90 MME/ day	•Initial prescription of Schedule II through IV controlled substance for acute pain •MME limit for opioid that has never been issued to patient before or has been issued more than 19 days prior							
New York SB 8139 (2019)	7 days	•Initial prescription for adult	x	x	x	x			
North Carolina HB 243 (2017)	5 days	•Initial prescription for certain Schedule II and III controlled substances for acute pain •Prescription for certain Schedule II and III controlled substances for post-operative relief	x	x	x	x		x	•Administered in hospital, nursing home or residential care facility

*Morphine milligram equivalents (MME)

**SUD/MAT denotes exceptions for treatment of substance use disorder (SUD) or medication-assisted treatment (MAT).

Note: The table summarizes the enacted legislation and the changes made to existing law. For a more comprehensive look at how states handle prescription drug limits, view the full statutory language.

Even when opioid prescriptions are limited, many patients may retain unused portions of their medications rather than disposing of them properly. As a result, many households have medicine cabinets with large reserves of unused prescription opioids that can be easily diverted to non-medical purposes, often without the owners' awareness. Parents of children who develop opioid use disorders often discover too late that the original supply of their children's opioid misuse was their own unused medications.

The available evidence suggests that drug take-back programs can increase awareness of the importance of the safe disposal and return of unused drugs.⁴⁵ Many drug takeback programs in the United States are once-per-year events such as the DEA's Drug Take Back Day, but some states have also established year-round take-back programs in partnership with community stakeholders. North Carolina's 'Operation Medicine Drop' is the largest take-back program in the U.S., and has collected nearly 89.2 million pills at more than 2000 events since 2010.⁴⁶

Some pharmacies have also begun to offer year-round on-site disposal for unused medications. States might work with these and other pharmacies to establish safe disposal sites in stores. Walgreens, for example, has established more than 1000 safe medication disposal kiosks in stores across 45 states and Washington, DC, and CVS has established safe disposal medication drop boxes.

Recommendations

- Limit first-time opioid prescriptions for acute pain to 3, 5 or 7 days with exceptions for chronic pain, cancer, palliative, and other appropriate cases.
- Continue to sponsor drug take-back days to raise awareness of the need to dispose of unused medications such as prescription opioids safely.
- Work with pharmacies to expand on-site prescription disposal boxes so that individuals can return unused medications to any pharmacy on any day of the year.

V. Patient Education

Patient education is another important component in the battle against opioid misuse. Despite the extensive attention to opioids by the media over the past year, many people remain largely unaware of the potentially addictive qualities of prescription opioids as well as their overdose risks. If prescribed opioids for pain, they may assume that they are safe simply because a prescriber recommended them. The CDC thus recommends extensive patient education for any patients to whom opioids are prescribed, including information on the risks of dependence, the danger of overdose, the need for periodic reassessment, and the availability of possible non-opioid-based treatments.⁴⁷ Although research on the effectiveness of patient education for opioid use is limited, it is clear that many patients lack information about their risks, safe use, and storage and disposal. A significant percentage of individuals who received prescription opioids, for example, do not recall having been given any information about safe storage (49%) or proper disposal (45%). Few respondents stored their medications in a locked or latched place (21%), and among those with leftover opioid medications, 61% said they kept them rather than disposed of them.⁴⁸

Several states are working on initiatives to increase patient education about opioids. The American College of Surgeons has developed a useful information sheet that covers most of the important information for patients. If modified to include information about safe disposal of opioids, this information might easily be distributed to patients on an easy-to-read sheet when opioids are prescribed.

The President's Commission on Combatting Drug Addiction and the Opioid Crisis and several Governors' Commission Reports further recommend developing general public media campaigns to inform the public about the dangers of opioids and increase prevention. The President's Commission suggests the following aims for a general media drug campaign: (1) to educate the public on risks and consequences of drug use in general, with emphasis on opioids; (2) to focus on the vulnerable - adolescents, college-age students, pregnant women, those harboring a psychiatric disorder, and the elderly - and highlight the detrimental effects of opioids; (3) to convey to parents their critical role in determining their children's use of drugs; (4) to show parents how to engage in crucial conversations with children about drugs; (5) to dispel common myths and misinformation on drugs; (6) to educate families on warning signs in family members and on reducing environmental risks for children; (7) to advance the concept of addiction as a treatable brain disease; and (8) to tailor messages to specific populations and communities in need.⁴⁹ In support of these points, the Commission notes that when asked, "Do you consider it necessary to take steps to keep your child from having access to prescriptions for painkillers such as OxyContin, Vicodin or Percocet in your home?" 57% of parents with prescription pain killers in their home answered no.

Recommendations

- Review patient consent and education guidelines to ensure individuals who are being prescribed opioids are being given information about their addiction and overdose risks and are instructed about proper storage and disposal of their medications.
- Fund and collaborate with private sector and non-profit partners to design and implement a statewide, multi-platform media campaign addressing the danger of opioids and highlighting the importance for safe disposal of unused medications.

VI. School-Based Programs

In 2016, 5.0 percent of students at Texas high schools reported using prescription opioids non-medically in their lifetimes and 2.4 percent reported using these products in the last month. Less than one percent of all students reported ever using heroin.⁵⁰ Although these figures are relatively low, they are still cause for concern, particularly given the addiction and overdose risks associated with these drugs. Moreover, habits and attitudes formed in high school can last a lifetime. High school drug prevention programs can not only reduce misuse of opioids among high school students but also provide valuable information for guarding against their misuse later in life.

Several states have passed legislation addressing the effects of the opioid crisis in schools. This legislation falls into two general categories:⁵¹

1. Some states have passed laws permitting the use of opioid antagonists such as naloxone in schools to combat overdose. Many of these states are providing school nurses with training and authority to administer these life-saving drugs. In 2017, at least six states (Kansas, Montana, Tennessee, Utah, Virginia, Wisconsin, and West Virginia) passed laws to this effect.
2. Several states are requiring the inclusion of opioid misuse and abuse education in health curricula, mostly in middle school and high school. In 2017, at least two states, Michigan and Maryland, passed legislation to include this material in health classes. So far, in 2018, at least six states (South Carolina, Minnesota, Arizona, Virginia, Pennsylvania and New York) have proposed legislation to incorporate instruction on the opioid epidemic.

The following presents a sample of some of the state approaches for combatting the opioid epidemic in schools:

1. To prevent addiction for youth, Arizona required its Department of Health Service to create an opioid abuse prevention education initiative and appropriated funds to the Attorney General for the purpose of awarding grants for community opioid education and prevention efforts.
2. The Governor's Opioid Working Group in Massachusetts recommended the following strategies to address the opioid problem in schools:
 - Support the implementation of substance use prevention curricula in schools. School districts should have the autonomy to choose the evidence-based curricula and the grade level that it is implemented in their district. Programs must be proven to reduce non-medical opioid use.
 - Integrate information about the risks of opioid use and misuse into mandatory athletic meetings and trainings for parents, students, and faculty.
 - Increase the use of screenings in schools to identify at-risk youth for behavioral health issues.
 - Develop targeted educational materials for school personnel to provide to parents about closely monitoring opioid use if their child is prescribed opioids after an injury, as well as, signs and symptoms of drug and alcohol use.
 - Partner with state universities that have strong education programs to develop substance use prevention curricula for school districts.

- Require state universities that educate teachers to integrate screening and intervention techniques as well as substance use prevention education into the curriculum.
3. The Governor's Task Force on Opioid Abuse in Wisconsin recommended that legislation be passed permitting school personnel such as school nurses to administer an opioid antagonist such as naloxone to a student on school premises if a student overdoses. The Task Force also recommended that Wisconsin charter a recovery school so that students who need in-patient care can receive it without missing a semester or year of school and expand the Screening, Brief Intervention, and Referral to Treatment (SBIRT) training to more teachers, administrators and school nurses (SBIRT is an evidence-based systematic method to screen for problematic use of all substances).

Recommendations

- Develop school-based health curricula to help students understand the dangers of opioids.
- Train teachers, administrators and school nurses so that they are able to appropriately and timely respond to the opioid problem facing students or their families.
- Increase the use of screenings in school through SBIRT or other programs to identify students at risk for misuse of opioids.

VII. Pregnant Women

One group who deserves special attention in opioid prevention campaigns is pregnant women. Surprisingly large numbers of women use opioids during pregnancy with potentially harmful consequences for themselves and their children. Pregnant women face the same risk of unintentional overdose and death as the general population.⁵² There is also a growing body of evidence suggesting that opioid use during pregnancy may be associated with substantial birth defects, including congenital heart defects, neural tube defects, and clubfoot.⁵³ Codeine has been implicated in several of these studies but additional studies are needed to consider the risks associated with individual prescription opioids.

Opioid use during pregnancy is also associated with neonatal abstinence syndrome (NAS), a condition that can require prolonged hospitalization and methadone or other opioid treatment with unknown long-term effects. A large medical record review found that among newborns with NAS, 65% had mothers who had at least one prescription for an opioid pain medication during the pregnancy.⁵⁴

Some women are already addicted to opioids when they become pregnant. These women are best treated with methadone or buprenorphine in evidence-based medication-assisted treatment (MAT) programs. These programs will be discussed below in the treatment section below.

Many women, however, are prescribed opioids by medical professionals for pain during pregnancy. The prevalence of prescription opioid use during pregnancy has increased significantly since 2000. In the United States as a whole, 14.4% of pregnant women with private insurance and 21.6% of pregnant women with Medicaid filled a pain prescription for opioid medications during pregnancy.⁵⁵ In Texas, these figures are slightly higher, with somewhere between 20-30 percent of women with Medicaid having received an opioid prescription during pregnancy.⁵⁶

Consistent with the increase in opioid prescription rates for pregnant women, the prevalence of opioid use disorders among pregnant women increased from 1.7 per 1,000 delivery admissions in 1998 to 3.9 in 2011.⁵⁷ The incidence of NAS has likewise increased approximately 400% nationally, from 1.2 per 1,000 hospital births in 2000 to 5.8 in 2012.⁵⁸ In Texas, Medicaid NAS births more than doubled between 2007 and 2014. The average cost for a NAS hospital stay was \$32,000, nearly 10 times the cost of an average newborn hospital stay.⁵⁹

Nora Volkow, Director of the National Institute on Drug Abuse, argues that high prescribing rates for women during pregnancy have probably contributed to recent increases in NAS. Given the possible association between prescription opioids and birth defects and their known association with NAS, she concludes:

Opioids should be reserved for pregnant women with severe pain that cannot be controlled through more benign means, and ideally limited to a short-term use. If long term use is unavoidable, such as for women in need of buprenorphine or methadone maintenance therapy for heroin addiction, then careful assessment and monitoring should be undertaken to minimize the risk of overdoses, NAS, and misuse.⁶⁰

The CDC's Treating for Two: Safer Medication Use in Pregnancy initiative, which encourages evidence-based prescribing practices and informed decision-making specifically for pregnant women and for non-pregnant women of reproductive age, provides one model of a safer prescribing program.

Recommendation

- Encourage medical professionals to prescribe opioids to pregnant women only short-term and when other medications and therapies are ineffective through means such as the HHSC Clinical Prior Authorization (Clinical PA) program.

VIII. Texas Medicaid Program

Medicaid enrollees are prescribed on average more than double the total annual opioid dose nationally compared with privately insured individuals.⁶¹ Research further shows that approximately one-fourth of Medicaid patients who regularly use opioid medications (more than 90 days) develop opioid use disorders.⁶²

The Texas Health and Human Services Commission (HHSC) has introduced two Texas Medicaid programs to prevent over-prescribing of opioids.

1. The Vender Drug Program (VDP) or Clinical Prior Authorization (Clinical PA): The VDP recommends point of sale claims processing safeguards, known as clinical prior authorizations that are approved by the Drug Utilization Review Board.⁶³ Prior authorization is required for medications based on client history or specific prescriptions including higher strength opioids and opioids prescribed concurrently with other potentially harmful drugs.
2. The Inspector General Medicaid Lock-In Program: This program restricts a Medicaid member to a designated prescriber and pharmacy if the patient suspected of: (1) receiving excessive health care services, including drugs; and (2) abusing and/or misusing controlled substances. Medicaid recipients in the lock-in program are restricted for a period of either 36 months (initial referral) or 60 months (subsequent review). Patients misusing substances repeatedly may be granted lifetime restrictions on using Medicaid pharmacy services.

Limited research exists on Clinical PA programs and opioid use, but several studies have found that they can reduce long-acting opioid prescriptions and reduce opioid abuse and overdose. A study of an Oklahoma prior authorization policy for Medicaid patients that required a trial of short-acting opioids prior to initiating extended-release/long-acting opioid therapy (consistent with CDC prescribing guidelines) found a reduction by half in the number of first time patients who were prescribed long-acting opioids but a slight increase in short-acting opioid prescriptions.⁶⁴ Similarly, a large-scale study on prior authorization in the Pennsylvania Medicaid program found that enrollees in Medicaid plans with PA policies tend to have lower rates of opioid abuse and overdose.⁶⁵

The effectiveness of the pharmacy and/or prescriber lock-in programs is more uncertain. A study by the Oklahoma Medicaid department in 2009 found that its lock-in program improved patients' behaviors such as less doctor shopping, lower utilization rates of controlled substances and fewer emergency room visits. However, Mercer Consulting Group⁶⁶ provided a report for the National Association of Medicaid Directors commenting that "[w]hen Medicaid agencies monitor claims data for controlled substances, they are typically only able to track data for providers reimbursed by Medicaid. This does not capture prescriptions to clients that may have been prescribed by non-Medicaid providers, or that may have been paid for in cash or by other third-party payers. This limits the ability of Medicaid programs to monitor the prescription behavior of its clients and; therefore, the effectiveness of lock-in programs."⁶⁷ One North Carolina study found that enrollment in lock-in programs was correlated with "a roughly fourfold increase in the likelihood and frequency of out-of-pocket controlled substance prescription fills."⁶⁸ The authors conclude that the lock-in programs are not as effective as expected. A more recent study echoes these findings. The authors use Prescription Drug Monitoring Program (PMP) records for beneficiaries enrolled in the North Carolina lock in program in the period of October 2010-September 2012 and find that the program was associated with increased prescriptions of controlled substances for the patients who use non-Medicaid payment.⁶⁹ More importantly, beneficiaries received greater dosages of dispensed opioids from both Medicaid and non-Medicaid payment sources during the lock-in program and the post-lock-in period.

As of the 2017 fiscal year, twenty-three states, including the State of Texas, have adopted the CDC guidelines into their Medicaid programs, according to a report by Kaiser Family Foundation (KFF). States such as Maine, New York and Rhode Island set new restrictions on the number of pills that a physician can prescribe to a patient.⁷⁰

Beginning on January 9th, 2018, Texas HHSC has also been taking steps to reduce the daily morphine equivalent dosage (MED) that Medicaid patients may receive. The initial limit will be set at 300 MED and will be applied to all opioid prescriptions with exceptions for those patients diagnosed with cancer or those receiving palliative or hospice care. The maximum allowable MED will decrease over time so that physicians and prescribing providers will have enough time to lessen a patient's opioid prescriptions gradually.

The tentative schedule is as follows:

Tentative Date	MED Limit
January 2018	300
May 2018	240
September 2018	160
January 2019	90

By January 2019, the maximum allowable MED limit will be set to 90 MEDs as recommended by the Centers for Disease Control and Prevention Guideline.⁷¹

Recommendations

- Review Texas Medicaid Prior Authorization and Lock-In Programs for effectiveness.
- Continue to align the Texas Medicaid program with CDC prescriber guidelines, including providing 3-7 day initial prescription limits on most opioids.

IX. Division of Workers' Compensation

The Texas workers' compensation system uses a closed drug formulary that lists approximately 300 prescription and non-prescription medicines that can be prescribed for outpatient use. Each drug is classified as a "Y" or "N" drug: (1) "Y" drugs can be prescribed without restrictions; (2) "N" drugs require a preauthorization request by a prescribing physician and approval by a utilization agent at the Texas Department of Insurance. Oxycodone (e.g., OxyContin), methadone, and buprenorphine combination product (e.g., Suboxone) are classified as N drugs. Non-N opioids include hydrocodone, tramadol, and codeine.

The closed formulary went into effect for new claims on September 1, 2011, and for older (legacy) claims on September 1, 2013. Under this program, opioid prescriptions within the Division of Workers' Compensation dropped from 44,930 in 2011 to 4,829 in 2015, amounting to a savings of over \$20 million. The number of high-dose opioid prescriptions also dropped from 55,086 in 2011 to 22,664 in 2015.⁷²

Recommendation

- Evaluate the Texas Workers' Compensation program for effectiveness in minimizing the risk of opioid misuse, treating pain, back-to-work rates, and productivity changes.

X. Tougher Fentanyl Laws

The emergence of illicitly produced fentanyl and fentanyl analogues in the drug market has drastically compounded the illicit opioid problem.⁷³ Fentanyl and fentanyl analogues are highly potent synthetic opioids that are often mixed with heroin or pressed into pill form and sold as counterfeit prescription opioid pills.

In order to deter illicit fentanyl sales, several states have introduced changes to sentencing guidelines relating to fentanyl trafficking. In Massachusetts, any person who traffics in fentanyl, “by knowingly or intentionally manufacturing, distributing, dispensing or possessing with intent to manufacture, distribute or dispense or by bringing into the commonwealth a net weight of more than 10 grams of fentanyl” faces punishment of up to 20 years in state prison. A new West Virginia law specifically criminalizes the unlawful manufacture, delivery, transport into state, or possession of fentanyl. Other states are similarly considering laws that aim to reduce the supply of fentanyl, including harsher penalties for smaller quantities. The harsher penalties are tied to smaller quantities of fentanyl because of the drug’s potency.

Recommendation

- Enhance sentencing penalties for the trafficking of fentanyl and fentanyl analogues.

TREATMENT

Although prevention may represent the most attractive response to the opioid epidemic, it is not sufficient, particularly in the current climate. Due to excessive opioid prescribing, poor information about the addictive nature of opioids, the recent influx of new sources of cheap heroin into the US, and other factors, millions of Americans currently find themselves with opioid use disorder, many of whom never could have imagined themselves going down the road to illegal drug use.

Current research characterizes opioid use disorder as a chronic and progressive brain disease caused by the alterations in the functioning of the brain. Changes in brain chemistry can drive people to seek out opioids compulsively even at great risk to themselves and others. Because of the way brain chemicals are affected, opioid addiction is further considered one of the hardest to overcome.

Evidence-based treatments are thus necessary for helping individuals with opioid use disorder to regain control of their lives and wean themselves from opioid dependence – as well as reducing the criminal and other unsocial behaviors often associated with opioid use disorder. Indeed, as a chronic, progressive disease, the risk of relapse for opioid use disorder does not drop below 15% for at least the first 4-5 (or more years) following successful treatment.⁷⁴ Successful recovery will require in many cases two, three, or more rounds of treatment and recovery support services once formal therapy ends. Successful treatment and recovery nonetheless can extend lives (in some cases by 50 years or more), enable individuals to become productive and contributing community members, restore families to wholeness, relieve stress and burden from family members, and reduce crime. The main treatment options include drug courts, medication-assisted treatments, and recovery support services such as certified recovery coaches. Populations who deserve special consideration when considering treatments include pregnant women, prisoners, veterans, and homeless persons.

I. Expand Opioid Use Disorder Screenings

The first step toward treating opioid use disorders is identifying individuals afflicted by them. While schools were discussed above as one site for screening children for opioid use, many other screening sites are necessary for identifying adults in need of treatment for opioid use disorder. Primary care physicians, emergency room doctors and nurses, pain management counselors, criminal and juvenile justice officers, child welfare workers, mental health providers, and others working in health-related or social service professions all need to be able to quickly and accurately screen individuals for substance use disorders and counsel them or refer them to specialized services as appropriate. Screenings for opioid use disorder and other substance use disorders might also be implemented as part of pre-arrest and post-arrest procedures in the criminal justice system, with opportunities for diversion into treatment programs for individuals with substance use disorders.

One widely used screening approach is the Screening, Brief Intervention, and Referral to Treatment (SBIRT). SBIRT is an evidence-based comprehensive method to screen for substance use disorders and, depending on the results of the initial screening, to follow up with a brief intervention or referral to specialty treatment.⁷⁵ SBIRT can help practitioners make a quick determination about the likelihood of a substance use disorder and to recommend appropriate specialty care or an appropriate specialty treatment provider for a follow-up assessment.

SBIRT has been associated with numerous benefits, including decreases in drug and alcohol use, successful referral to and participation in substance use treatment programs, and significant healthcare cost savings.⁷⁶ The model is broad and flexible enough to be used in various settings and can help more individuals to get the treatment they need.

Recommendation

- Encourage the use of SBIRT or other evidence-based screening tools among health care and social service professionals to increase the effective detection and treatment of opioid and other substance use disorders.

II. Medication-Assisted Treatment

Medication-assisted treatment (MAT) is the gold standard of care for opioid use disorder, even for special populations such as pregnant and postpartum women.⁷⁷ Medication-assisted treatment involves the use of U.S. Food and Drug Administration (FDA) approved medications in combination with psychosocial therapy for the treatment of substance use disorders. Research has demonstrated that MAT is more effective than opioid detoxification, tapering, or abstinence at reducing heroin and prescription opioid abuse, overdose deaths, and rates of infectious disease transmission.⁷⁸

Currently, there are three medications approved by the FDA to treat opioid use disorder: methadone, buprenorphine-containing medications, and naltrexone (e.g., Vivitrol). Each medication works differently, but in general, they are all considered opioid maintenance therapies, taken instead of illicit opioids to reduce opioid-related withdrawal symptoms and craving, with the hope of decreasing risk of relapse to opioids. Importantly, unlike methadone and buprenorphine (which are opioid-agonists and have addiction potential), naltrexone (Vivitrol) is a non-addictive alternative that does not produce a “high”. Methadone is dispensed daily in approved methadone clinics. Buprenorphine is available in daily tablet form, in combination sublingual products, and once-monthly injections. It must be prescribed in a medical office from a doctor who has obtained a waiver. Vivitrol, an injectable form of naltrexone, is available in monthly formulations from any provider with prescribing authority.

A meta-analysis of cohort studies found that both methadone and buprenorphine-containing products are safe and effective in reducing opioid-related and all-cause mortality in persons with opioid use disorder.⁷⁹ Less research exists on naltrexone (Vivitrol), but the limited evidence that exists suggests it is just as effective as buprenorphine.⁸⁰ Although more research needs to be done on the comparative effectiveness of these medications, it is generally understood that the optimal medication and treatment plan for any individual will depend on patient characteristics and circumstances.⁸¹ Making sure that a variety of treatment options are available to patients is thus crucial to treatment success.

While MAT has proven safe and effective for opioid use disorder, it is estimated that less than half of people with opioid use disorder are treated with evidence-based MAT.⁸² Samet and colleagues estimate that only 20 per cent of people with opioid use disorder are taking one of the three FDA approved medications⁸³ and, according to Wakeman and Barnett, approximately 80 percent of people with opioid use disorder do not receive care.⁸⁴

Two major barriers to MAT access are inadequate insurance coverage and lack of providers.⁸⁵ While the Affordable Care Act requires that insurers cover treatment for opioid use disorder, it does not specify which benefits must be covered. Therefore, MAT may not be covered or may be covered for only a limited duration which can limit its effectiveness. Ensuring Medicaid coverage for MAT is particularly important because of the disproportionate impact of opioid prescriptions on Medicaid beneficiaries: “Medicaid beneficiaries are prescribed painkillers at twice the rate of non-Medicaid patients and are at three-to-six times the risk of prescription painkillers overdose.”⁸⁶

Prior authorizations may also serve as a barrier to MAT, as approvals can take a significant amount of time and disrupt the clinical ‘moment’ when a patient has finally agreed to try treatment.⁸⁷ A 2017 survey of physicians indicated that prior authorization requirements by third-party payers were the most commonly reported barrier to prescribing buprenorphine for opioid use disorder.⁸⁸ Most state Medicaid programs, including Texas Medicaid program, require prior authorization for buprenorphine-containing products. As noted above, prior clinical authorizations in the Medicaid program appear useful for reducing overall overprescribing of opioid medications for pain. When treating opioid use disorder, however, rapid response is imperative. The Legislature thus might consider

exempting buprenorphine from Medicaid prior authorization when prescribed as part of an evidence-based MAT for opioid use disorder.

A shortage of authorized MAT providers is the other major barrier to opioid use disorder recovery. Only 25,021 registered physicians out of 872,615 nationwide are authorized to prescribe buprenorphine-containing products such as Subutex or Suboxone.⁸⁹ Thus, the number of persons with opioid use disorder far exceeds the number of eligible providers able to prescribe buprenorphine.⁹⁰ According to Wakeman and Barnett, “To have any hope of stemming the overdose tide, we have to make it easier to obtain buprenorphine than to get heroin and fentanyl.”⁹¹ To accomplish this, the authors advocate evidence-based MAT with buprenorphine in primary care physicians’ offices, something other countries have also done. Having methadone and buprenorphine available for prescription in primary care physicians’ offices is especially important for those who live in rural areas without an opioid treatment program (e.g., methadone clinic).

Treatment programs more generally have been slow in offering MAT: only 23 percent of publicly-funded treatment programs and less than 50 percent of private sector programs report offering medications.⁹² Geography further compounds the issue of access. For instance, 30 million Americans live in counties that do not have physicians who are authorized to prescribe buprenorphine.⁹³ Those living in rural areas have a more difficult time not only finding an authorized provider but also continuing treatment because of dispensing limits; limits that would require more frequent trips to a pharmacy. Allowing for the prescription of controlled substances via telemedicine is one way that states have sought to improve access to MAT.⁹⁴

The under-treatment of substance use disorders has been called one of Texas’s biggest public health crises.⁹⁵ In 2016, only 14% of eligible indigent patients received MAT for opioid use disorders through HHSC-funded SUD services (non-Medicaid). Currently Texas only has 85 licensed providers of methadone, and most counties do not have a doctor able to prescribe buprenorphine.

Figure 8 shows counties in Texas with substance use disorder treatment facilities. Only 79 out of Texas’s 254 counties (roughly 31%) have a substance use disorder clinic, and many of these clinics do not offer patients access to buprenorphine or methadone maintenance.⁹⁶

Figure 8: Texas Counties with a Substance Use Disorder Facility⁹⁷

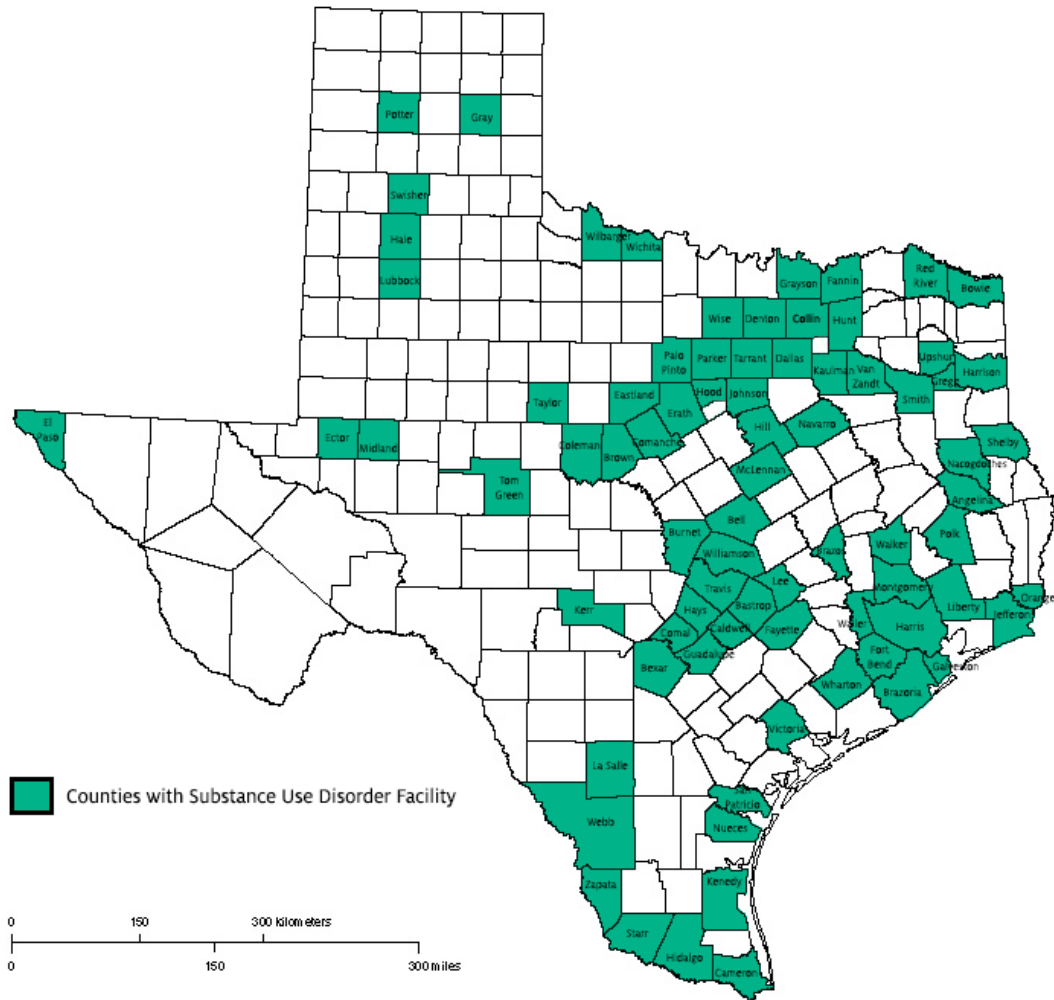


Figure 9 shows Texas counties with opioid treatment programs that provide medication-assisted treatment. The number of Texas counties with even one opioid treatment program that provides MAT for people diagnosed with opioid use disorder is noticeably less than the number with substance use disorder facilities (27 counties with MAT opioid treatment programs vs. 79 countries with substance use disorder facilities). For example, although Fort Bend County with a population of 741,237 has four substance use disorder facilities, it has none that treat opioid use disorder with evidence-based MAT.

Figure 9: Texas Counties with Opioid Use Disorder Programs offering MAT

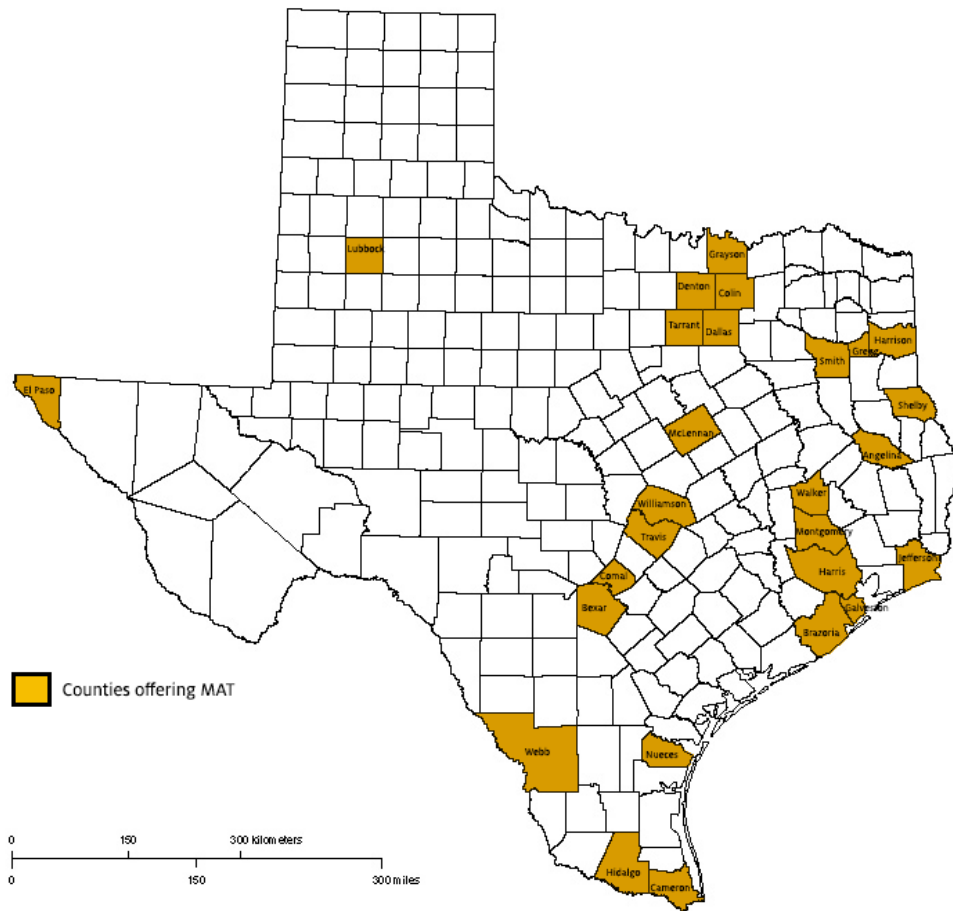
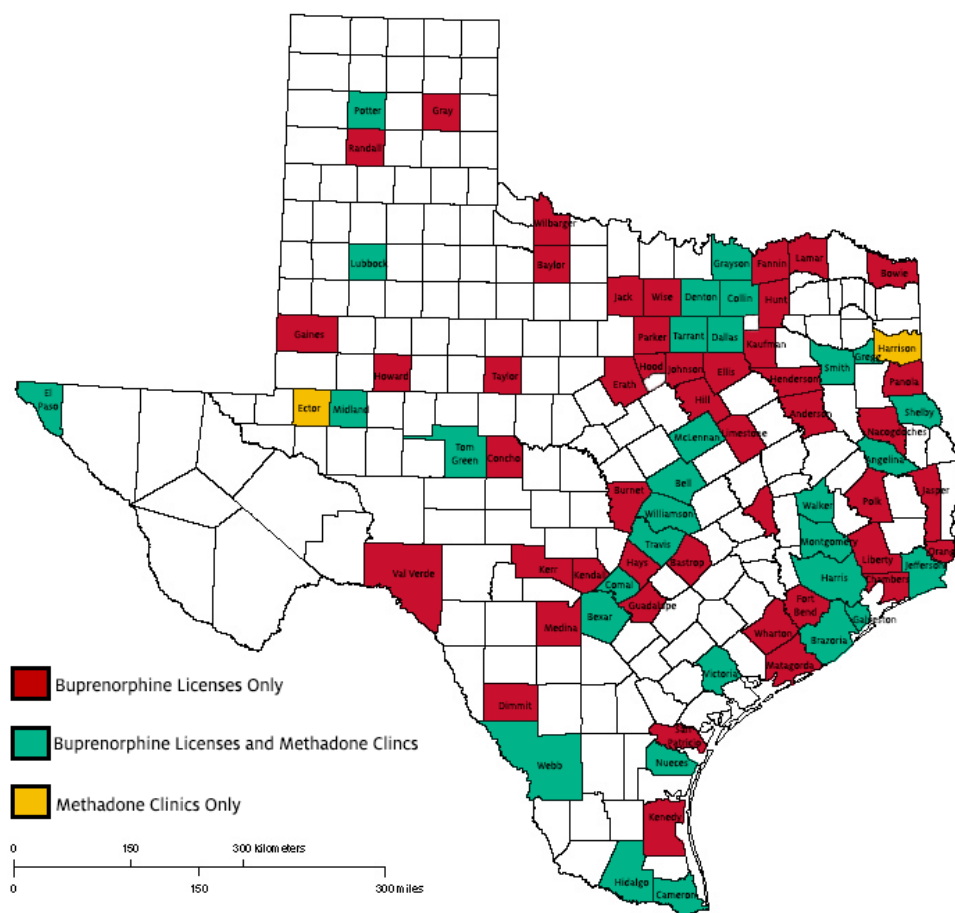


Figure 10 shows the Texas counties with methadone clinics and/or medical providers with buprenorphine waivers. Physicians, nurse practitioners, and physician assistants with buprenorphine waivers can provide MAT for opioid use disorders outside opioid treatment program facilities. Since most counties that lack a methadone clinic also lack a physician who can prescribe buprenorphine, MAT can be difficult to access for individuals with opioid use disorder in these areas.

Figure 10: Texas Counties with Methadone Clinics and/or Doctors who can Prescribe Buprenorphine



Vermont's special system of the Hub and Spoke for opioid addiction provides one solution for providing expanded MAT in rural communities. In this system, the hub provides medication-assisted treatment (MAT) and the spoke provides less intensive follow-up care. Some patients are also allowed to check in by phone or video in certain cases. This system has increased accessibility and collaboration in addiction treatment and enables Vermont citizens to have widespread access to MAT.⁹⁸

In addition to expanding access to evidence-based MAT in rural communities, the Texas Legislature might consider making MAT more accessible to two other groups. Substance use disorder is a factor in a large number of cases where Child Protective Services in Texas removes children from their homes. Parents whose children are removed due in part to substance use disorders should be referred for evidence-based medication-assisted treatment.

There is also growing national movement to initiate MAT treatment for high-risk opioid users (e.g., people who overdose) right from the emergency room. Health systems and hospitals should be directed to facilitate access to MAT for overdose victims while in the ER.

Recommendations

- Expand insurance coverage for evidence-based medication-assisted treatment through Medicaid and other programs.
- Increase the number of opioid use disorder programs across the state offering MAT, with attention to geographical distribution.
- Increase the number of medical providers across the state with buprenorphine waivers, with attention to geographical distribution.
- Require all state-licensed addiction treatment programs that admit patients with opioid-use disorders to provide access to MAT.
- Explore the possibility of exempting certain buprenorphine products from Medicaid prior authorization when prescribed for opioid use disorder.
- The federal 21st Century CURES Act, signed into law in 2016, offers states potential grant opportunities to expand treatment for substance use disorders. Texas should pursue this grant funding to increase access to substance use disorder treatment and services, specifically medication-assisted treatment.
- Implement some version of Vermont's Hub and Spoke system for extending MATs to rural communities.
- Authorize the prescription of controlled substances, as well as the associated counseling (currently prohibited by Medicaid), via telemedicine in rural communities to improve access to MAT.
- Direct Texas Child Protective Services (CPS) to refer parents whose children are removed from their homes due in part to substance use disorders for evidence-based medication-assisted treatment.
- Direct health systems and hospitals to facilitate access to MAT for overdose victims while in the ER.

III. Opioid Use Disorder Treatment for Pregnant Women

Evidence-based medication-assisted treatment with methadone or buprenorphine is considered the standard of care for pregnant women with opioid use disorder.⁹⁹ Although neonatal abstinence syndrome remains a concern with MAT, MAT is still associated with improved birth outcomes for opioid-addicted pregnant women.¹⁰⁰ Opioid dependent pregnant who undergo medication-assisted withdrawal are at high risk of relapse for prescription opioid misuse or heroin use during pregnancy which can be harmful to the fetus particularly in the later months of pregnancy. Thus, experts have concluded that the risks associated with maintenance medications are less than those associated with abstinence and relapse to illicit drug use.¹⁰¹

As with the population generally, access to MAT remains a significant barrier to pregnant women. This is especially true in rural areas where long travel distances require large commitments of time and money and easy access to a car. Pregnancy exacerbates these barriers as obstetric and neonatal care must be coordinated with addiction treatment services.¹⁰² Improvements to access to MAT in general may particularly benefit pregnant women.

Accumulating evidence suggests that Buprenorphine Maintenance Therapy (BMT) may be preferable to Methadone Maintenance Therapy (MMT) for pregnant women.¹⁰³ Birth weights tend to be higher for BMT compared with MMT-exposed neonates in several but not all studies.¹⁰⁴ Some cohort studies and randomized controlled trials have likewise observed decreased NAS severity and lower risk of NAS treatment in BMT relative to MMT exposed neonates.¹⁰⁵ Nora Volkow explains that the rate of opioid clearance influences the severity of withdrawal, such that opioid drugs with slow clearance rates such as buprenorphine result in less severe withdrawal than drugs with faster clearance rates such as methadone.¹⁰⁶

A recent meta-analysis of the published literature showed, however, that the apparent protective effect of BMT relative to MMT on neonatal outcomes may be due to maternal risk factors that independently affect prenatal treatment and neonatal outcomes.¹⁰⁷ BMT is typically used in more stable opioid-dependent pregnant women who do not need the structure of observed daily dosing required for MMT in the United States.

Recommendations

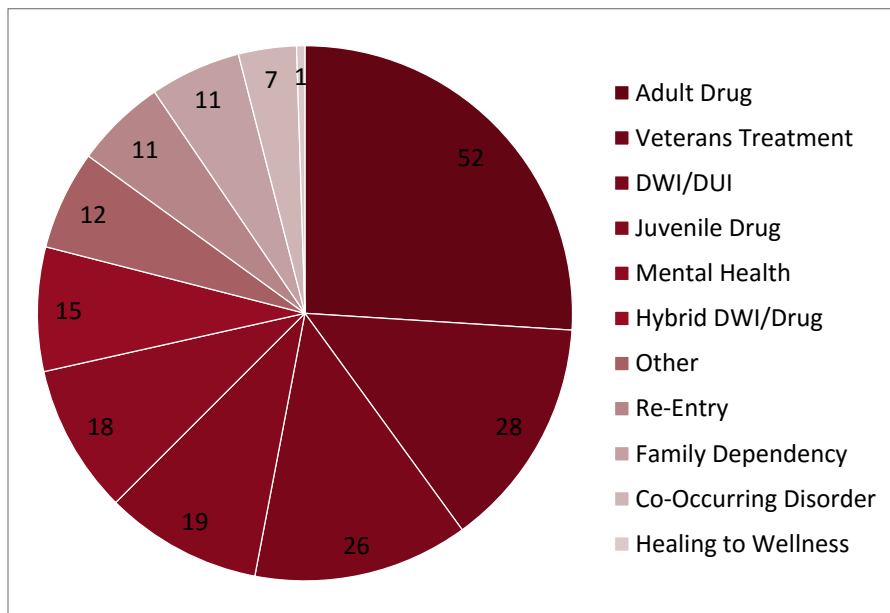
- Increase access to MAT for pregnant women with opioid use disorder.
- When appropriate, encourage the use of buprenorphine in MAT programs for pregnant women with opioid use disorder, recognizing that methadone may be better in some cases.

IV. Drug Courts

Drug courts are specialized courts with responsibility for cases involving substance-abusing offenders. These courts usually mandate that offenders undergo regular drug testing and treatment services and meet other requirements, such as obtaining a GED or maintaining employment, in exchange for avoiding a prison term. Eligibility requirements for drug courts vary across jurisdictions but are usually restricted to non-violent offenders with evidence of substance dependence.¹⁰⁸

The first Texas drug court was established in 1993 in Jefferson County.¹⁰⁹ In 2001, the legislature mandated that all Texas counties having populations over 550,000 start drug courts, and in 2007, the requirement was lowered to 200,000. Texas currently has the fourth-highest number of drug courts in the US (Trailing California, New York, and Ohio), serving 52 out of 254 counties in the state.¹¹⁰ The majority of these courts are adult drug (52), veterans' treatment (28), and DWI/DUI (26) courts (See Figure 11).

Figure 11: The Number of Drug Courts by Types in Texas



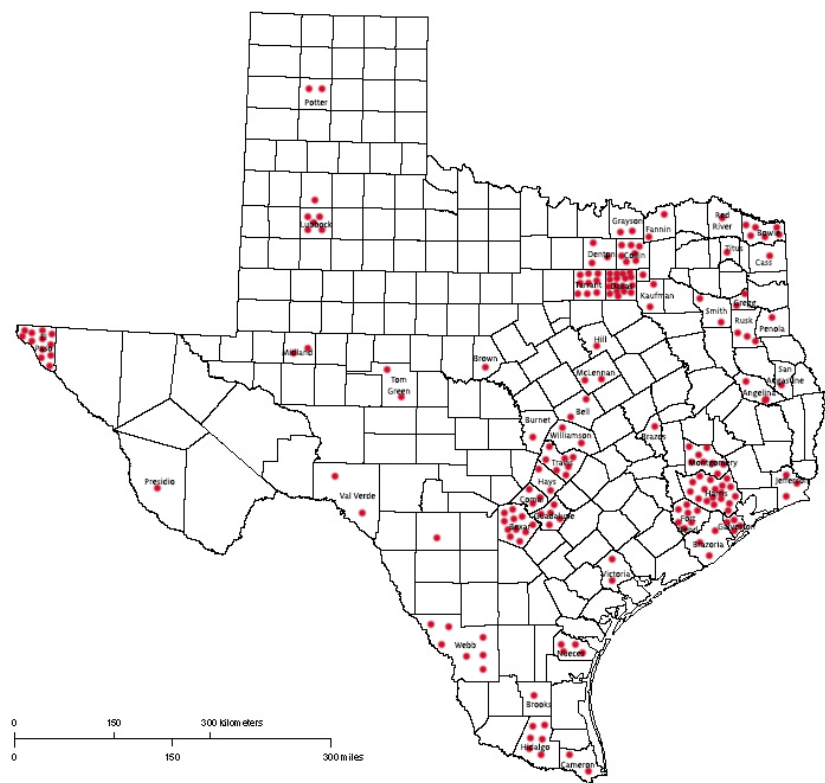
Source: NDCRC¹¹¹

Research has generally found drug courts to be effective in reducing recidivism. One of the most rigorous studies of drug courts found that drug court participants were significantly less likely than a comparison group to recidivate after 12 months (48% vs. 64%).¹¹² A follow-up study found similar results after 24 months (66.2% vs. 81.3%).¹¹³ One meta-analysis of drug court studies concluded that drug court participants tend to have lower recidivism than non-participants with average effect analogous to a drop in recidivism from 50% to 38%. The authors further found that these effects last up to three years.¹¹⁴ Another study similarly found that drug courts significantly reduce the incidence of incarceration from a base rate of 50% to roughly 42% for jail and 38% for prison, but not the amount of time that drug court participants as a whole spent behind bars.¹¹⁵ Although drug courts may reduce crime and recidivism, this study suggests they may not necessarily lower prison or jail populations if the individuals who are terminated from these programs are sentenced to more time in prison or jail.

Most research on the costs and benefits of drug courts conclude that they generate significant public savings compared to traditional criminal courts.¹¹⁶ One frequently cited study found that drug courts may cost more on average than they yield in benefits, but the cost data for this study was based in large part on an interview with one individual.¹¹⁷ Even this study nonetheless acknowledges that drug courts are effective in reducing crime and have the potential to yield benefits far above their costs.

Although Texas drug courts serve 80% of Texas residents, more than 200 counties lack any sort of drug court (adult drug court, family court, etc.) (See Figure 12). For example, Taylor County is home to almost 140,000 people, and has no drug court.¹¹⁸ The closest courts are in the counties of Tom Green to the south and Brown to the southeast, both approximately an hour and a-half away. Ellis County – south of Dallas – is the most populated county in Texas without a drug court, with a population of almost 170,000 people. Potter County is the only county with a drug court among the 26 counties at the north-most side of the state. Importantly, some of these counties appear to have high levels of opioid use.

Figure 12: Drug Courts by Texas Counties



There are several indicators of a potential opioid problem in a county. One is the number of opioid prescriptions per resident per year. The counties with the highest opioid prescription rates per resident are listed in Table 3.¹¹⁹ Six of these nine counties have no drug courts. Most notable in this list are Orange County with a population of 84,964 and Hood County with a population of 56,857. All but one of these counties also lack a substance abuse program offering evidence-based MAT, and several lack even one medical professional with a buprenorphine waiver.

Table 3: Counties with a Range of over 112.5 Prescriptions per 100 Residents per Year

County	Population	Drug Courts	MAT Programs	Buprenorphine Waivers
Bowie	93,860	6	0	5
Brown	38,271	1	0	0
Childress	7,052	0	0	0
Gregg	123,745	2	1	2
Hood	56,857	0	0	1
Lamar	49,791	0	0	2
Nolan	14,993	0	0	0
Orange	84,964	0	0	3
Wilbarger	12,892	0	0	1

Source: www.census.gov, and ndcrc.org/database.¹²⁰

Table 4 lists the Texas counties with opioid prescription rates between 82.4 and 112.5 per 100 residents, or roughly 50 to 100% above the state average. Twenty-three of these 30 counties have no drug court. Most notable in this list are Johnson, Wichita, and Hunt counties with populations of 167,301, 132,000, and 93,872, respectively. Once again, all but a handful of these counties lack a substance use disorder program offering evidence-based MAT, and many lack any medical provider with a buprenorphine waiver.

Table 4: Counties with a Range of 82.4 and 112.5 Prescriptions per 100 Residents per Year

County	Population	Drug Courts	MAT Programs	Buprenorphine Waivers
Angelina	87,805	2	1	1
Atascosa	48,981	0	0	0
Burnet	46,804	1	0	2
Calhoun	21,744	0	0	0
Cooke	39,895	0	0	0
Dimmit	10,418	0	0	1
Goliad	7,562	0	0	0
Gray	22,404	0	0	1
Grayson	131,140	2	1	12
Hardin	57,139	0	0	0
Hopkins	36,496	0	0	0
Hunt	93,872	0	0	2
Jefferson	256,299	3	1	12
Johnson	167,301	0	0	5
Liberty	83,658	0	0	2
Limestone	23,527	0	0	1
Lubbock	305,225	5	2	6
Nacogdoches	65,580	0	0	2
Palo Pinto	28,570	0	0	0
Polk	49,162	0	0	1
San Patricio	67,215	0	0	1
Scurry	17,050	0	0	0
Smith	227,727	2	2	9

Stephens	9,337	0	0	0
Terry	12,715	0	0	0
Titus	32,904	0	0	0
Victoria	92,084	2	0	1
Wichita	132,000	0	0	3
Wood	44,314	0	0	0
Young	17,979	0	0	0

Source: www.census.gov, and ndcrc.org/database.¹²¹

The Opioid and Health Indicators Database has compiled data on the self-reported use of opioids for non-medical reasons. This provides another indicator of a potential opioid problem in a county. Table 5 lists the 10 Texas counties with the highest percentage of individuals 12 years or older who reported having used pain medications for non-medical reasons. Five of those counties have no drug court – most notably Bastrop with a population of 84,761. Bastrop and most other of these counties also lack MAT Programs and medical professionals with buprenorphine waivers.

Table 5: Counties with the Highest Self-reported Use of Pain Relievers for Non-medical Purposes in Texas (2014)

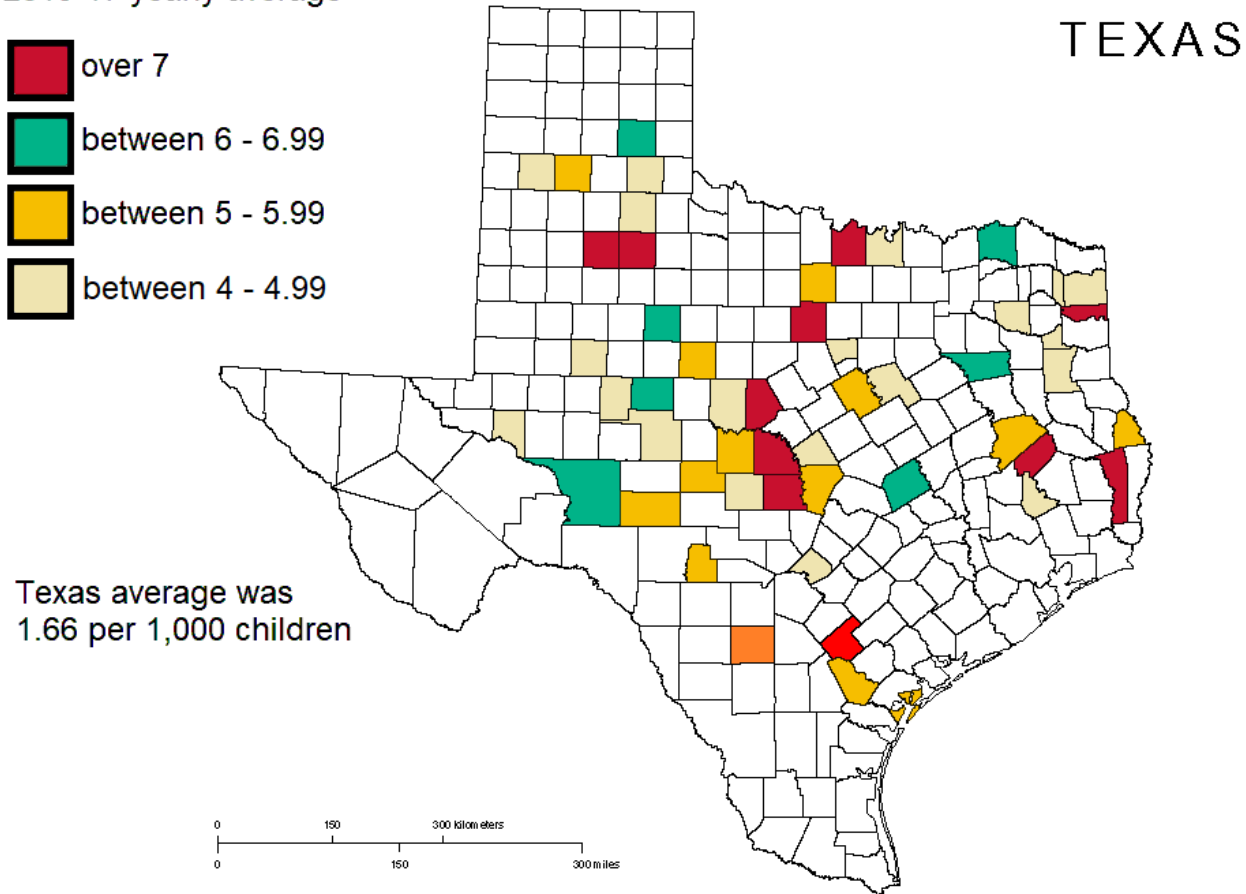
County	Population est. (2017)	People misusing pain relievers	Drug Courts	MAT Programs	Buprenorphine Waivers
Travis	1,199,323	56,368	7	4	64
Williamson	528,718	24,850	2	1	14
Hays	204,470	9,610	2	0	4
Bastrop	84,761	3,984	0	0	4
Burnet	46,243	2,173	1	0	2
Caldwell	41,161	1,935	1	0	0
Fayette	25,272	1,188	0	0	0
Llano	21,210	997	0	0	0
Lee	17,183	808	0	0	0
Blanco	11,626	546	0	0	0

Source: www.census.gov, ndcrc.org/database, and opioid.amfar.org.¹²²

One other measure of potential opioid abuse is the number of children removed from their homes due to substance use disorder, which is a factor in about two-thirds of child removals. Removals per 1000 children where substance abuse was a factor was over twice as high in rural counties last year as in non-rural counties. The map below (Figure 13) shows the counties with the highest child removal rates where substance use disorder was a factor. Only one of the counties with the highest rate of removals (over 7) – Brown County – has a drug or family court.

Figure 13: CPS Removals where Substance Abuse was a Factor

CPS Removals where Substance Abuse
is a factor per 1,000 children
2015-17 yearly average



Source: The Coleman Chronicle.¹²³

Together, Tables 3, 4, and 5 and Figure 13 suggest that Texas needs to look at the geographical distribution of its drug courts, possibly establishing new courts in several rural counties or creating courts that serve multiple counties. The 21st Century Cures Act can help towards the creation of more drug courts.

Research on drug courts has identified several other areas for possible improvement. A recent study of Texas drug courts found that individuals who graduated from drug court programs were far less likely to recidivate than those who were terminated from the programs.¹²⁴ The findings suggest that reforms promoting program retention should be a priority for increasing drug court effectiveness. Since evidence shows that compliance within the first month of drug court is a strong predictor for graduation outcomes, the author of this study concludes that drug courts could enhance their effectiveness by increasing supervision within the first 30 days of drug court supervision by, for example, increasing the number of random drug tests.

Ensuring that evidence-based treatments are offered to drug court participants represents another important reform for increasing their effectiveness.¹²⁵ Studies have shown that drug court participants who are engaged in medication-assisted-treatments are more likely to graduate and not recidivate than those who are not engaged in treatment.¹²⁶ Research has also found, however, that drug court participants do not always receive substance use disorder treatments that are consistent with evidence-based recommendations.¹²⁷ Many drug court judges oppose

medication-assisted treatments utilizing methadone or buprenorphine and instead require patients to become completely abstinent as a condition of participation or graduation.¹²⁸ National studies have found that only a little more than half of all drug courts permit participants to offer evidence-based medication-assisted treatment (MAT) as part of their program.¹²⁹ Given that MAT is considered the best practice for addressing opioid use disorder (see below) and likely to increase successful completion of drug court programs, drug courts need to integrate it into their regular treatment programs. Texas state law currently does not require drug courts to utilize evidence-based MAT whenever possible, and currently MAT supply is insufficient to enable all drug court participants to receive it.¹³⁰

Recommendations

- Support and expand drug courts across the state with special attention to geographical distribution and need and the possibility for creating multi-county courts for rural areas.
- Direct drug courts to increase supervision of participants within the first 30 days of supervision by increasing the number of random drug tests and interactions with recovery coaches or others.
- Require drug courts to include access to evidence-based medication-assisted treatments (MAT) for patients with opioid use disorder.

V. Opioid Use Disorder Treatment in Prisons and Jails

Although research evidence supports the use of MAT programs for opioid use disorder among the population at large, less work has focused on opioid maintenance therapies in jails and prisons. This is particularly important, as previous research suggests that 55% of inmates that enter correctional facilities with a substance use disorder will relapse within one month of being released.¹³¹ This is unfortunate, as a recent report suggests that a significant number of inmates are previous or current opioid users and misusers,¹³² and most deaths following release from prison occur within the first few weeks and are caused by overdose.¹³³ Limited research does indicate, however, that opioid maintenance programs used in prisons are as effective as those in the community.¹³⁴ Although these interventions may have promise, significant barriers exist to implementing these programs.

A 2017 report found that out of the 5,100 jails and prisons in the United States, fewer than 30 are offering evidence-based MAT, the gold standard of care to treat an opioid use disorder. A number of factors explain this low number. First, cost is a significant barrier. Naltrexone extended-release injection (Vivitrol), which lasts for 30 days, has promise for long-term effectiveness, but comes at a high cost of \$1,000 per injection. Methadone and buprenorphine, taken in a pill form, come at a much lower cost of about \$400 a month. However, unlike naltrexone (Vivitrol), buprenorphine combination products (e.g., Suboxone®) have a high abuse potential, and recent reports indicate that inmates may be seeking these products in prisons to get high, rather than use them for their intended purpose.¹³⁵

While opioid maintenance therapies are in use in Texas, only recently have they initiated prison-based programs. Recently, in Harris County Jails, a Vivitrol program has been initiated that provides an injection to inmates with opioid use disorder immediately prior to their release. Currently, this program does not offer Vivitrol for those upon entry to jail or for those currently in jail. Otherwise, there are currently no programs within Texas prisons or jails that provide methadone or buprenorphine to inmates.

Guidelines published by the World Health Organization recommend beginning opioid maintenance therapy for inmates with opioid use disorder prior to release from incarceration to reduce rates of relapse, overdose, and recidivism. These guidelines are readily being followed in Europe and Australia, where opioid maintenance therapies are readily being offered in the prison system. Yet, in the United States, there is a significant delay (other than for pregnant women with opioid use disorder), possibly due to logistical hurdles, security and safety concerns, and differing perceptions as to what constitutes appropriate care for inmates.¹³⁶ Moreover, inmates who were on opioid maintenance therapy prior to incarceration are often required to discontinue use of the treatment during their time in the correctional facility.¹³⁷

Evidence-based medication-assisted treatment is the first-line, gold-standard treatment for opioid use disorder no less for prisoners than any other group. An open label study of naltrexone (Vivitrol®) in the prison system found that those completing all 6 required doses were 68.7% less likely to be re-arrested and 37.5% less likely to test positive for opioids following release.¹³⁸ Examining differences between types of evidence-based MAT, one study found that there were no differences in outcomes between methadone and buprenorphine, but buprenorphine seemed to be more accepted and tolerated for inmates than methadone.¹³⁹ Finally, a randomized controlled study examining counseling alone compared to methadone maintenance for opioid use disorder in prisons found that methadone maintenance was superior to counseling alone in predicting entry to treatment and abstinence at 6 months post release.¹⁴⁰

Recommendations

- Expand access to MAT throughout the criminal justice system, including arranging MAT for inmates in residential treatment.
- Establish pilot programs offering MATs in prisons and jails (prior to release and/or throughout incarceration) using methadone, buprenorphine, and long-acting injectable and oral naltrexone in order to determine their effectiveness in reducing recidivism, substance abuse, overdose, and other opioid-related outcomes after release.

VI. Mental Health and Opioid Use Disorder

Roughly 40 percent of individuals with a substance use disorder have co-occurring psychiatric disorders.¹⁴¹ Veterans and homeless individuals are two groups (discussed below) for whom the co-occurrence of substance use disorders and psychiatric disorders are especially high. Patients with opioid use disorders who do not receive treatment for mental health conditions generally have poor treatment outcomes for substance use disorder.¹⁴² It is therefore important that substance use disorder treatment programs also have the capability to treat mental health problems. High rates of co-morbidity with mental health disorders also warrant substance use screenings when a mental health diagnosis has been made.¹⁴³

Recommendation

- Direct mental health care professionals to screen for substance use disorders, and substance use disorder professionals to screen for mental health problems, and both groups to provide treatments for both conditions when possible or to make appropriate referrals.

VII. Veterans

According to a study published in *Medical Care*, veterans are twice as likely to die from accidental opioid overdose compared to the general population.¹⁴⁴ Although active duty military personnel have a lower level of illicit drug use than civilians, their abuse of prescription drugs is also higher and increasing. In 2008, 11 percent of service members reported misusing prescription drugs, up from 2 percent in 2002 and 4 percent in 2005. Most drugs that are abused are opioid medications.¹⁴⁵ Many service members and Veterans experience chronic pain, a debilitating condition that often is difficult to treat. A study published in the *JAMA Internal Medicine* examines the prevalence of chronic pain and opioid use among 2,500 soldiers following deployment and finds that 44 percent had chronic pain and 15 percent regularly used opioids – rates much higher than the general population.¹⁴⁶ Opioid drug use in military populations is nearly triple what is observed in civilian populations mainly because opioids are among the most commonly prescribed medications in the military for treating pain, particularly among those with combat-related injuries.¹⁴⁷ The concurrent epidemic of suicides among Veterans is likely driven in part by high rates of opioid use disorder.

In view of the seriousness of opioid misuse in military populations, the military has implemented opioid risk mitigation strategies, including the Sole Provider Program and the Controlled Drug Management Analysis and Reporting Tool. The Sole Provider Program identifies individuals determined by health care providers or military commanders as being at increased risk for opioid misuse. The Controlled Drug Management Analysis and Reporting Tool (CD-MART) allows a provider to create location-specific pharmacy dispensing reports based on the number of prescriptions, pharmacies, providers, and total quantity of tablets/capsules.

The Department of Veterans Affairs (VA) has also sought better ways to manage pain in Veterans while limiting the risks of opioids. The VA and Department of Defense published the Clinical Practice Guideline for Management of Opioid Therapy for Chronic Pain (updated in 2016) to provide clear and comprehensive evidence based recommendations on treating patients with chronic pain. The VA also launched the Opioid Safety Initiative in 2013, the first of several system-wide initiatives to address opioid overuse, which focuses on education, pain management, risk mitigation, and addiction treatment.¹⁴⁸

There have also been some national legislative efforts to address opioid use disorder among veterans. The Veterans Opioid Abuse Prevention Act that aims to connect VA health care providers to a national network of state-based prescription drug monitoring programs (PMPs) in order to track and identify patterns of opioid abuse. Currently VA doctors can consult a state-based program, just like private-sector physicians. Unlike private-sector physicians, however, VA doctors are unable to tap into a national network of state-based programs, which restricts their ability to track patterns of abuse for out-of-state patients. The bill was approved by the House Veterans Affairs Committee in May 2018 and will face a vote in the full chamber.¹⁴⁹ In addition, President Trump issued a Presidential Memorandum for the Heads of Executive Departments and Agencies to use all lawful means to combat the drug demand and opioid crisis. In particular, Trump administration has launched an \$81 million partnership to research better pain management techniques for veterans.¹⁵⁰

State and local governments have paid less attention to the opioid epidemic among veterans, but some programs do exist. For instance, the Milwaukee VA Medical Center and Medical College of Wisconsin is working with community partners in Milwaukee to prevent opioid use disorder (OUD) among U.S. military veterans through *Milwaukee PROMPT: Prevention of Opioid Misuse through Peer Training*. This project focuses on prevention of opioid use disorder in a subset of the Milwaukee veteran population by seeking to change their knowledge, attitudes, and behaviors related to opioid use through a peer-delivered curriculum. Mental Health America Wisconsin (MHA)

supports the peer mentors working with veterans by providing supervision, consultation, training, and program and curriculum development.¹⁵¹

Recommendations

- Request VA health providers to report all opioid records to the Texas Prescription Monitoring Program (PMP) and allow them to access information in the PMP database in order to track all prescriptions for opioids and identify potential opioid use disorder among veterans.
- Partner with local communities to offer support and education to veterans in order to address opioid use disorder (e.g., through the HHSC-supported Military Veteran Peer Network and Texas Veterans Commission grant program).
- Increase access to a range of treatment options for opioid use disorders including evidence-based medication assisted treatment (e.g., methadone and buprenorphine), as well as complementary and alternative medical approaches for chronic pain.

VIII. Homeless Persons

Substance use disorders are a known risk factor for homelessness. In one study, 25 percent of homeless people identified drug use as the primary reason for homelessness.¹⁵² The association between homelessness, mental illness, with substance-related disorder is also well established. Tsai and colleagues found that 75% of patients experiencing homelessness as well as being diagnosed with substance use disorder in the past year also had a comorbid nonsubstance-related mental illness.¹⁵³ Overall, opioid use disorders are particularly hard on homeless populations, where the prevalence of mental health conditions and substance misuse is high, and health care access is often limited. Overdose has now surpassed HIV as the leading cause of death among homeless adults and opioids are responsible for more than 80 percent of these deaths.¹⁵⁴

Due to limited treatment options and fragmented health care delivery systems, homeless people confront significant obstacles to the access and utilization of health care services. There are several system-level barriers that may hinder patient recovery and lead to lower success rates. According to National Health Care for the Homeless Council,¹⁵⁵ these barriers include:

- Strict criteria for grant-funded substance abuse programs: Often, policy changes or rigidity of programs could mean that patients are recommended or referred to programs that they are ineligible for.
- Lack of available resources or programs: Once a patient has met all requirements; space in the programs may not be there, leading to loss of hope and mistrust.
- Lack of enabling services: These may include transportation services, lack of flexibility around work schedules, and childcare.
- Cost of treatment: Associated costs of treatment (i.e., copays/premiums), as well as potential loss of coverage, can all present challenges to deliver care.
- Reduced access or provision of doctor-supervised prescriptions: Reduced dispensing of pills to treat chronic pain may also increase self-medication, or use of street drugs (i.e., heroin) for some individuals who are homeless

The social service needs of homeless individuals, including access to employment and housing, tend to exacerbate the harmful consequences of substance use disorders.¹⁵⁶ Hwang and colleagues indicate that integrated treatment which incorporates housing and employment provides better health outcomes than usual care for people who are homeless.¹⁵⁷ In other words, not only treatment but also complementary measures such as housing and employment are needed to address the opioid problem among homeless people. It is imperative that the administration, healthcare system, and homeless services systems and providers work together to respond to the critical rates of addiction and death within this population.

In 2017, the United States Interagency Council on Homelessness identified some strategies that communities, providers, and policymakers might use to address the intersection of homelessness and the opioid crisis:¹⁵⁸

- **Assess the prevalence of OUDs and opioid misuse among individuals experiencing homelessness:** Communities grappling with the opioid crisis and homelessness can convene local stakeholders to better understand the scope and complexities of the issue locally.

- **Develop and implement overdose prevention and response strategies:** Access to naloxone should be a critical component of community plans. Maximizing the number of housing providers, emergency services, health care providers, and others who regularly interact with individuals experiencing homelessness who have access to naloxone should be a key strategy to turn the tide on lethal opioid overdoses.
- **Strengthen partnerships between housing and health care providers to provide tailored assistance:** Homelessness service providers should also strengthen their partnerships with health care providers, particularly those in the federally-supported Health Center network, where patients are offered comprehensive and complete care, funded by the Health Resources and Services Administration.
- **Improve access to medication-assisted treatment (MAT):** Homelessness service providers should connect with health care providers at the local level, as well as landlords and housing providers, to consider how individuals experiencing homelessness who have opioid use disorders can have access to MAT.
- **Remove barriers to housing:** Individuals experiencing homelessness should be offered access to permanent housing options using a Housing First approach with few to no treatment preconditions or other unnecessary barriers, which will help individuals establish housing as the foundation upon which they can build healthier, stable lives.¹⁵⁹

Recommendations

- Cooperate with communities to identify homeless people at risk of opioid overdose.
- Partner with homeless and health service providers to ensure homeless people at risk of opioid overdose have access to naloxone and medication-assisted treatment.
- Work with housing providers and employers to provide homeless people at risk of opioid overdose with permanent housing options and job opportunities.

IX. Recovery Coaches

Recovery coaches (peer recovery support services, peer-delivered recovery support services) have been around for decades, yet little research has examined the efficacy of these programs. In general, these programs utilize individuals who have had a history of substance use disorders and incorporate them in health care teams. The argument in favor of recovery coaches is that patients are more likely to engage in outpatient treatment and less likely to relapse and need future hospitalization. They can play an especially important support role for individuals engaged in evidence-based medication assisted treatment.

In Texas, recovery coaches have been used at recovery centers such as Charlie's Place Recovery Center (located in Corpus Christi).¹⁶⁰

Previous systematic reviews of the efficacy of recovery coaches for substance use disorders generally point to recovery coaches being helpful in the treatment of substance use disorders.¹⁶¹ The existing research suggests recovery coaches are associated with increased treatment retention, improved relationships with treatment providers, increased satisfaction with treatment overall, and reduced relapse rates.¹⁶²

However, existing studies lack experimental rigor, so their findings should be taken lightly until more research can be conducted. Additionally, the research on the cost effectiveness of recovery coaches has only begun. One of the most recent studies suggest recovery coaches are cost effective.¹⁶³ In this study, nine recovery coaches --- who had been in recovery for at least two years --- were trained and integrated in a health care team. Over 600 patients were part of this program which was conducted over a period of one year. The authors concluded:

Preliminary findings demonstrate reduced hospital inpatient admissions and increased outpatient visits following recovery coach contact. Among patients prescribed buprenorphine, abstinence significantly increased in the six months following recovery coach contact. Initial results suggest that recovery coaches may be an effective new addition to the SUD [substance use disorder] care team.

While these findings suggest there is evidence of cost effectiveness, the researchers also point out that --- given the lack of a substantial body of rigorous research --- future research is needed.

Recommendations

- Support a one- to two-year pilot program, with rigorous research protocols in place, to study the cost effectiveness of recovery coaches as part of a comprehensive treatment plan at select areas in the state of Texas. Use these findings to make a further determination on public investment.
- Ensure all recovery coaches are educated about the benefits of MAT.

HARM REDUCTION

Harm reduction refers to “a set of practical strategies and ideas aimed at reducing negative consequences associated with drug use.”¹⁶⁴ Rather than attempting to prevent drug use or promote recovery per se, harm reduction attends to the worst consequences of substance use disorders and offers strategies for mitigating them. Although harm reduction policies are no one’s first choice, they can play an important role in combatting opioid addiction by, for example, minimizing overdose deaths and some of the public health risks associated with opioid use.

I. Naloxone

Over 115 Americans die daily from opioid overdoses.¹⁶⁵ Naloxone is an opioid antagonist medication that can reverse opioid overdose, if administered in a timely manner, by essentially drawing the opioids off brain receptors and reversing respiratory depression.¹⁶⁶

Naloxone is administered through either injection (intravenously, intramuscularly, or subcutaneously) or intranasal administration.¹⁶⁷ Approved by the FDA in 1971 to treat opiate overdose, it has been used by hospitals and EMS providers in the field for over 40 years.¹⁶⁸ Groups like the President’s Commission on Combating Drug Addiction and the Opioid Crisis now commonly recommend that naloxone be made as widely available as possible for saving the lives of overdose victims.¹⁶⁹

Prior to 2014, FDA-approved naloxone use was limited to healthcare settings (hospital or field EMS).¹⁷⁰ This limitation was lifted in 2014 with the FDA’s approval of Evzio, a naloxone auto-injector (Enzio) that can be used outside the healthcare setting.¹⁷¹ In 2015, access to naloxone was increased further by the FDA’s approval of NARCAN®, a naloxone nasal spray (NARCAN). The nasal spray is much easier to administer—by family members as well as first responders; it is also safer for first responders since it eliminates accidental needle stick (FDA, 2015).¹⁷²

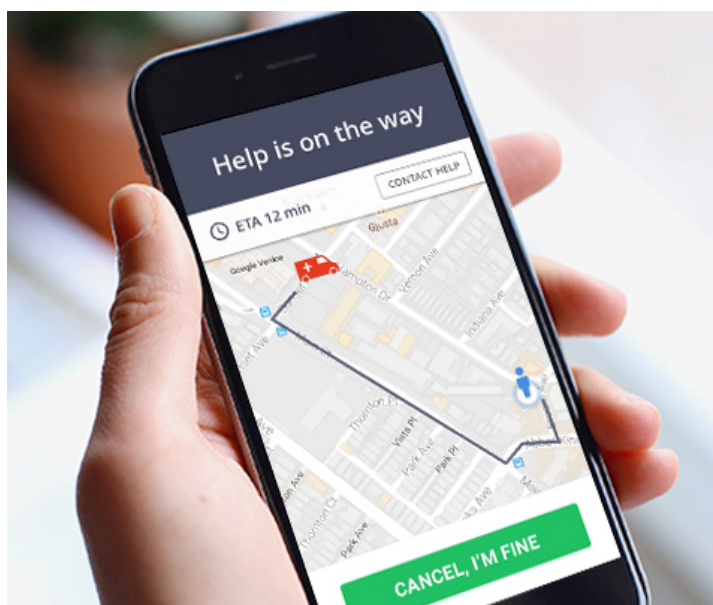
There are now four different types of naloxone rescue kits widely available for use: an intramuscular injection from a vial via a syringe, an intramuscular auto-injector device, a single-step nasal spray, and a multi-step nasal spray combining a pre-filled syringe with a nasal atomizer. Regardless of formulation, most rescue kits contain two doses of naloxone in case the first dose is insufficient to induce spontaneous respiration. While the FDA has only approved

the auto-injector (EVIZO®) and single-dose nasal spray (NARCAN) for bystander administration, most community-based naloxone distribution programs favor the other two formulations due to significantly lower costs.¹⁷³

Even with the timely administration of naloxone in the field, an overdose victim must be transported promptly to an emergency facility since the effects of the antidote can wear off after 30-90 minutes and multiple doses may be required.¹⁷⁴ The increase in overdoses from synthetic opioids like fentanyl is particularly problematic since fentanyl is 50-100 times more potent than morphine and 30-50 times stronger than heroin.¹⁷⁵ As such, significant amounts of naloxone might be required to reverse respiratory depression from overdoses of fentanyl and its derivatives.¹⁷⁶

Since 2016, a smartphone app has existed to assist opioid users and bystanders in identifying an overdose situation and responding by administering naloxone (See Figure 14). The app connects opioid users with a crowd-sourced network of those carrying naloxone; the app can also interface with a breathing monitor to indicate when a patient's respiration is significantly diminished.¹⁷⁷

Figure 14: Overdose App



Source: Challenge.gov.¹⁷⁸

If naloxone is administered without an opioid present, it does no harm. In the presence of an opioid, naloxone's most significant clinical adverse effect is that it may bring on withdrawal symptoms in opioid users. The precise dosage which balances the return of spontaneous respiration and opioid withdrawal is not well known.¹⁷⁹

Many states have changed their laws to increase access to naloxone outside of the healthcare/EMS setting and encourage bystander administration of naloxone to overdose victims. Faster administration of naloxone in the pre-EMS setting can improve outcomes; therefore, friends and family members of opioid users at risk for overdose are a target market for naloxone distribution. The American Medical Association, American Pharmacists Association, and the National Association of Boards of Pharmacy have been strong supporters of increased layperson access to

naloxone.¹⁸⁰ According to Davis and Carr, due to these organizations' support, as well as other initiatives, pharmacy dispensing of naloxone increased 1,170% from 2013 fourth quarter to 2015 second quarter.¹⁸¹ Forty-four states (as of August 2016) allow third-party prescriptions, which permit naloxone to be prescribed to those not in a provider-patient relationship with the prescriber. Pharmacist scope of practice has been expanded in many states to allow licensed pharmacists to prescribe naloxone directly.¹⁸²

As of January 2018, 46 states now permit the purchase of naloxone without an individual prescription.¹⁸³ In June, 2016, Texas passed a law that gives any pharmacy that has a standing prescription for naloxone the right to dispense it to anyone without an individual prescription.¹⁸⁴ The process works in the following way: a physician signs an agreement called a standing order so that the pharmacist can dispense the drug at his or her discretion. Pharmacists also can sell the drug to a third party: a family member or friend of someone who uses opioids.

However, it is unclear how many pharmacists are familiar with the rule, and how many pharmacists keep naloxone in stock. Stocking and dispensing of naloxone in community pharmacies is not uniform and is under evaluation nationwide.¹⁸⁵ Consequently, the reach and overall effectiveness of the law and policy is uncertain. Greater education efforts --- including online education programs --- for pharmacists, prescribers, and social workers would reduce the uncertainty and lack of familiarity.

The weight of evidence on widespread naloxone distribution is positive. In weighing all the issues concerning the use of naloxone, the American Association of Addiction Medicine offered the following summary in their 2016 Policy Statement:

ASAM encourages the co-prescribing of naloxone for people at risk of overdose, which includes those receiving non-acute opioid treatment for pain and those being treated for opioid use disorder. The prescription should be complemented by appropriate patient and/or family education about the risks of opioid overdose, the signs/symptoms of overdose, the proper use of naloxone for revival of accidental overdose victims, and instructions for referral to emergency care, addiction treatment, and the need for follow-up. Persons provided with naloxone supplies for use in the event of opioid overdose should be offered training and education in the prevention, detection, and appropriate response to an overdose, including the recognition of opioid overdose symptoms, proper technique for administration of the opioid antagonist, either by intramuscular injection or by the nasal mucosa, and essential follow-up procedures, including referral to emergency medical services. This includes people provided with naloxone supplies under a public health program of harm reduction. Laypersons offered prescriptions for naloxone at medical visits or provided with nasal naloxone delivery devices through public health agencies, should also be provided education on its proper use and the need to refer successfully rescued individuals for further medical care.¹⁸⁶

Recommendations

- Equip all first responders including law enforcement officers with naloxone and train them in its use both for their own safety (see below) and so that they can administer it to individuals who have overdosed.
- Continue with the training and deployment of naloxone to all first responders within the state as well as to others who are likely to encounter a person who has overdosed.
- Permit school personnel such as school nurses to possess and administer an opioid antagonist such as naloxone to students on school premises in cases of overdose.
- Encourage naloxone distribution to patients (or the family and friends of patients) on long-term opioid therapy to protect against accidental overdose and complement distribution with patient and family education on the use of naloxone.
- Encourage naloxone distribution to patients (or the family or friends of patients) undergoing medication-assisted treatments (MAT) to protect against accidental overdose and complement distribution with patient and family education on the use of naloxone.
- Encourage overdose prevention training and naloxone distribution in emergency departments and other hospital settings to individuals who have survived an overdose or appear at risk of overdose.
- Provide education programs for pharmacists, prescribers, and social workers about naloxone distribution to ensure greater understanding of the law and the importance of keeping naloxone in stock.

II. First Responders

The opioid epidemic has had a significant impact on all types of first responders—not just EMS. Firefighters increasingly run medical calls and are often on scene before EMS units arrive. Law enforcement is oftentimes on scene before firefighters since drug overdose situations may involve crime scenes. As such, there is an increasing practice of every first-responder unit or apparatus carrying several doses of naloxone. The naloxone is not only intended to treat overdose patients; it is also intended to treat first responders promptly in the event of exposure.

Synthetic opioids such as fentanyl and its derivatives could potentially pose a significant threat to first responders since they can be absorbed through the skin in addition to being inhaled or ingested. The National Institute of Occupational Safety and Health (NIOSH) has issued advisories to first responders regarding the threat of fentanyl exposure, focusing on exposure routes of inhalation, ingestion, mucous membrane, and transdermal, in addition to accidental injection (needle stick). The DEA has stated that fentanyl is so potent that only 2-3 milligrams—roughly equal to 5-7 grains of salt—can cause respiratory distress, full arrest, and death. See Figure 15.

Figure 15: Potentially Deadly Amount of Fentanyl



Source: Drug Enforcement Administration¹⁸⁷

The DEA recommends that first responders carry naloxone and be trained in its administration.¹⁸⁸ The DEA has also issued guidance to first responders regarding the use of personal protective equipment (PPE) and training to minimize the risk of exposure. Large amounts of suspected fentanyl, such as that encountered in a drug arrest, should be handled by hazardous materials personnel with appropriate Level “A” PPE (See Figure 16).

Figure 16: Fentanyl Clean-up Site



Source: Drug Enforcement Administration¹⁸⁹

Several examples illustrate the potentially serious threat that heroin, fentanyl, and other synthetic opioids pose to first responders. Eleven SWAT officers became ill after exposure to fentanyl and heroin during a 2016 drug raid in Hartford, Connecticut. The deployment of their flash-bang grenade stirred up the powdered drugs, enabling transmission by inhalation.¹⁹⁰ Three paramedics and a firefighter were hospitalized in 2017 after being exposed to carfentanil while treating a cardiac patient in an ambulance in Bucks County, Pennsylvania.¹⁹¹ A firefighter/paramedic was administered naloxone by his crew after responding to a possible fentanyl overdose in Winnipeg, Canada in 2016.¹⁹² A deputy sheriff and two EMTs were treated after heroin and fentanyl exposure while responding to a drug overdose in Harford County, Maryland in 2017.¹⁹³

While not the focus of this report, it should be noted that psychological health problems in first responders have reached epidemic proportions. Police officers and firefighters are more likely to die by suicide than by a line-of-duty incident.¹⁹⁴ Repeated exposure to traumatic events can create cumulative stress overload, which can lead to adverse mental health outcomes, including ultimately suicide.¹⁹⁵ The opioid epidemic's impact on increasing calls for service can contribute further to this cumulative stress overload.

Recommendations

- Provide training to all Law Enforcement Officers, Firefighters, and Emergency Medical Technicians regarding the dangers of contact with fentanyl and the use of naloxone (NARCAN) to prevent death from overdose.
- Distribute naloxone to all first responders and require that they have it readily accessible at all times while on duty.

III. Good Samaritan Laws

In addition to widespread access to naloxone for overdose prevention, another harm reduction policy is “Good Samaritan” laws. Good Samaritan laws allow individuals in the company of overdose victims to avoid arrest if they call 911, stay with the person, and administer naloxone, if available – even if they were involved in substance use with the victim. Good Samaritan laws have been implemented in most states to protect against opioid overdose; prior to these laws, a drug-using bystander might call 911, but then flee the scene to avoid arrest, thereby reducing the likelihood of a positive outcome for the overdose patient, or not call 911 at all in order to avoid being charged with a criminal offense.

There are three types of Good Samaritan overdose laws: laws which provide protection against arrest and/or prosecution of a person who reports an overdose, laws which provide protection from arrest for possession of any controlled substance, and laws which provide protection from violation of probation and or parole through reporting an overdose and assisting the patient.¹⁹⁶

The effectiveness of Good Samaritan laws depends on bystanders’ knowledge of the laws, emphasizing the need for educational outreach to target populations. It also depends upon the social aspects of drug use inasmuch as those who take drugs with others present are more likely to be rescued if they overdose.¹⁹⁷ Outreach programs should encourage people to not only make 911 calls immediately in cases of suspected overdose, but also to remain at the scene and provide EMS with information that may improve the patient’s outcome.¹⁹⁸

Evans and colleagues found that those individuals with a more extensive history of drug use were proportionately more aware of Good Samaritan laws.¹⁹⁹ Similarly, those who had ever experienced an overdose personally, or seen someone else overdose, were more aware of the laws. In this same study, 95.5% of the subjects reported a willingness to call 911 in the event of an overdose-related emergency even if there were drugs at the scene. Of those surveyed who reported a willingness to call 911, only 46% were aware of Good Samaritan laws.²⁰⁰

While more empirical research on the effectiveness of Good Samaritan laws is needed, one study comparing states with Good Samaritan laws to those without found a 15% decrease of opioid overdose deaths in the former. The decrease was even higher for African Americans at 26%.²⁰¹

Currently, the state of Texas does not have a Good Samaritan drug law. In 2015, the 84th legislature passed a bill that would have provided a defense to prosecution for “Good Samaritans” who called emergency services for victims of overdoses. Governor Abbott vetoed the bill on the grounds that it did not include adequate protections to prevent misuse by habitual drug abusers and drug dealers.

Recommendation

- Enact a “Good Samaritan” law and monitor its effectiveness and possible unintended consequences.

IV. Fentanyl Test Kit

Fentanyl and other synthetic opioids such as carfentanil have inundated the United States in the last few years.²⁰² Because these substances are often manufactured to resemble less-potent opioids, and even small amounts are highly potent, many of those who have died from them may have been unaware that they were taking fentanyl-laced substances.²⁰³

In order to protect against this risk, some harm reduction organizations in the US have begun distributing fentanyl test strips as a means for testing for the presence or absence of fentanyl in street-purchased drugs. Even advocates of test strips recognize that it is not a solution to the problem of drug use. But overdoses have been increasing and this means of testing is a tool to slow the deaths due to overdose.

On the issue of effectiveness, there is a new but small set of findings. A 2018 study by the Bloomberg School of Public Health²⁰⁴ assessed the feasibility of checking illicit street drugs for fentanyl and determined the test strips were cost effective and could detect the presence of fentanyl with a high degree of accuracy. The study also found a substantial number of individuals using street drugs had interest in using the test strips (drug checking) to eliminate the overdose threat. An issue, however, in drug user adoption of the test strips is their cost which could discourage interest in their usage.²⁰⁵

Recommendation

- Establish a pilot program for the distribution of fentanyl test kits and study its effectiveness.

V. The Angel Initiative

A very recent initiative --- the Angel Initiative --- allows citizens to walk into a police precinct, turn in their drugs, and request treatment without fear of prosecution. Assistance is also provided to parents to secure safe placement for their child while they are in treatment, in lieu of placing their child in the foster care system. The Angel Initiative originated in Gloucester, Massachusetts in 2015. Termed the Gloucester Addiction Initiative, this program provides treatment to those struggling with the disease of addiction instead of putting them behind bars.

The program has been described this way: “The police department works with several local treatment centers and clinics to place them in recovery programs instead of in the hands of law enforcement. When an addict walks into the police station and asks for help getting into a rehab facility, the department couples that person with an “angel,” a volunteer that helps guide the individual through the process. The participant is evaluated, their needs assessed, and they are fast tracked into a local detox program.”²⁰⁶

In their 2016 report, “Addressing 21st Century Drug Issues: Law Enforcement’s Leadership Role,” the International Association of Chiefs of Police (IACP) state the preliminary findings:

Using a three-pronged approach, the department facilitates treatment, provides nasal NARCAN to those who can’t afford it, and works for new state legislation relating to drug enforcement and treatment. At the end of 2015, the program has directed 350 people to treatment with a 31 percent drop in drug-related and/or ancillary crimes. They have partnered with 50 departments in 15 states, 100 treatment centers, and insurance providers for follow-up when individuals leave the treatment centers.²⁰⁷

Recommendation

- Educate local communities about the Angel Initiative and encourage implementation at the local level.

VI. Family Support Programs

Substance use disorder can be devastating not only to those individuals who develop this chronic disease but also to their families. Jamie Edwards of the Refuge Center of Houston writes and speaks poignantly on the challenges of having a daughter with opioid use disorder. She describes not only the pain that comes each year at times like Mother's Day when she is reminded all too vividly about her daughter's disease, but also the day-to-day stress of living with a loved one with opioid-use disorder and how easy it is to become addicted to trying to cure them.

As Jamie argues, family members play a critical role in the recovery process for individuals with opioid use disorders. Individuals with strong family support networks are more likely to recover from this disease than those without them. Families can, however, easily burn-out or turn away from their loved-ones in frustration or not know what to do when their loved one relapses after apparently undergoing successful treatment. The emotional stress and financial costs of living with a child, sibling, or spouse with opioid use disorder can further tear families apart.

The Refuge Center of Houston attempts to address some of these far-reaching consequences of the opioid epidemic by (among other things) providing recovery coaching not only to individuals with substance use disorders but also to their families. As the Refuge Center's website states, "Coaching is critical for family members who live with an active addict and/or alcoholic. Coaching can help family members learn how to develop, enforce, and maintain boundaries...Coaching helps to refocus the family onto the family and its individual members and away from the constant chaos, drama, and crisis of the addict."²⁰⁸

In support of expanded family coaching services for family members who live with someone with substance use disorder, Jamie Edwards and others are working with Texas state legislators to propose a new bill (Alex's Bill) in the 2019 legislative session to expand HB 1486 relating to peer specialists and services, which was passed by the 85th legislature, to include peer counseling or recovery coaching support for families.

Recommendation

- Establish a pilot program to support and study recovery coaching for families affected by substance use disorder.
- Consider expanding funding to support families affected by substance-use disorder through initiatives such as Alex's Bill.

VII. Needle Exchange Programs

Needle exchange programs (NEP; also referred to as syringe exchange programs, needle syringe programs, or syringe service programs) are community-based programs that provide access to sterile needles and syringes free of charge, as well as safe disposal for used needles and syringes. NEPs are considered harm reduction strategies for injection drug users of opioids (e.g. heroin), and not designed to provide treatment for opioid use disorders.

The World Health Organization conducted a study providing evidence for the efficacy of NEP's reducing the spread of injection-borne illnesses,²⁰⁹ and these recommendations are supported by the American Medical Association. Other important components of NEPs include prevention and education resources regarding spread of disease. Specifically, many NEPs provide prevention materials, such as alcohol swabs, sterile water bottles, and condoms, as well as education surrounding safe injection practices and wound care, overdose prevention, and referral to substance use treatment (medication assisted treatment).

Needle Exchange Programs also offer sexually transmitted infection education and prevention, such as PrEP, PEP, and STI testing. The Center for Disease Control supports the implementation of NEPs for injection drug users to reduce the risk of spreading infections and even suggests that more needle exchange programs are needed in the United States to prevent additional HIV infections.²¹⁰ The CDC provides specific guidelines for organizations to request funding and implement such programs.²¹¹

Needle exchange programs are currently not in use in Texas. In 2007, legislation was passed to establish a pilot program in Bexar County. However, the legislation did not exempt volunteers from the state's drug paraphernalia law, and the pilot program shut down when the local district attorney warned that individuals working at needle exchange sites would not be shielded from criminal prosecution.

Based on a 2017 report, there are currently 299 NEPs being operated in the United States. The highest concentration of NEPs is in California, where 40 are currently running. Comparing NEPs in the US to those abroad, NEPs in the US are particularly nascent. The most recent report (2009) indicated that 77 countries were implementing NEPs in various forms. Australia and Brazil provide the most comprehensive types of NEPs, which include needle exchanges and disposals, as well as distribution of safe injection supplies and referrals for substance use treatment if needed. Some countries even provide "clean needle" vending machines to allow access to safe injection at all hours (Australia and New Zealand).²¹²

The primary goal of NEPs is to reduce the spread of injection-borne illnesses including HIV and Hepatitis C. A number of studies have been conducted examining both the short-term and long-term efficacy of NEPs in a variety of contexts. A study investigating the efficacy of some of the first NEPs found that, among those individuals engaged in NEPs, incidence of HIV infection decreased by as much as 33%.²¹³ Research further suggests that needle exchange programs do not increase the rates of injection drug use.²¹⁴ A recent systematic review of needle exchange programs implemented in the prison system found that NEPs showed strong evidence for the reduction of HIV and hepatitis C, with few negative consequences observed.²¹⁵

Research examining the impact of NEPs in the United States found that public funding for NEPs was associated with lower rates of HIV, greater number of sterile syringes distributed, and overall greater number of health and social services provided.²¹⁶ However, there still remains mixed evidence as to the long-term impact of NEPs²¹⁷ partly due to limited guidelines on how to properly conduct research into their efficacy. Traditionally, these

studies have relied primarily on self-report data rather than more objective measures. Overall, while the general consensus supports the use of NEPs to reduce the spread of HIV and other injection-borne illnesses among injection drug users, more rigorous research should be conducted.

Recommendation

- Establish a pilot needle exchange program in Texas to determine its effectiveness in reducing injection-borne illnesses and promoting education about opioid risks and treatment opportunities.

VIII. Safe Injection Sites

Safe injection sites (also known as supervised injection sites, supervised injection facilities, safer injection facilities, drug consumption facilities, or medically supervised injection centers) are legal facilities where people can inject pre-obtained drugs under medical supervision. The goal of these sites is to reduce health and societal problems associated with injection drug use. In particular, through medical supervision, they are focused on reducing rates of drug overdose. Many injection sites are staffed by physicians or individuals trained to administer oxygen and naloxone (NARCAN) in the case of suspected opioid (or other substance) overdose. Along with these goals, safe injection sites may be the first step towards opioid-addicted individuals entering treatment for substance use. Importantly, most of these programs explicitly prohibit the sale or purchase of recreational drugs within the facility, and some even have strict entry criteria. For instance, some places require users to have identification cards, some restrict access to local residents, and some restrict the types of drugs being used in these facilities (injection drugs only, for example). Overall, safe injection sites are designed to reduce opioid involved overdose and do not provide treatment for substance use disorders.

Safe injection sites are currently not used in the United States. However, San Francisco, New York City, and some other cities have plans to implement them in the near future. Proponents of these programs argue that these programs are necessary to help combat the ever-increasing opioid epidemic in the United States, particularly given the rise in emergency room visits for opioid overdose. However, there is considerable resistance in the United States to these programs. Opponents argue that safe injection sites have the potential to “normalize” injection drug use behaviors. Moreover, no limits have been placed on what is and is not allowed in these facilities in terms of drug use. Are these places for new drug experimentation? How many overdoses are “allowed” per day? These are important questions that require clear answers before safe injection sites might be widely implemented in the United States.

The first and largest concentration of safe injections sites exist throughout Europe, where there are currently 100 operating in 66 cities in 9 countries. Recently, safe injection sites have also begun to appear in Canada. These facilities are most commonly staffed by trained nurses, social workers, and medical doctors, but employ a wide range of individuals involved in the medical care of injection drug users. These sites have 4 main components, with the ultimate goal of improving rates of survival: assessment and intake, supervised consumption area, other service areas, and referral. Proponents of safe injection sites in Europe argue that safe injection sites are, in fact, the first point of contact to engage injection drug users into drug treatment.²¹⁸

Little research has examined the short term and long-term efficacies of safe injection sites. However, some research has found that they do meet their intended purpose by reducing the rates of opioid-involved morbidity and mortality. A recent study examining safe injection sites in Canada found that safe injection sites produced 88 fewer opioid-related deaths per 100,000 people, 67% fewer ambulance calls for overdoses, and a decrease in HIV infections.²¹⁹ Additionally, safe injection sites may provide another type of intervention for some individuals.

Overall, safe injection sites are low cost ways to reduce the risk of overdose and blood-borne illness.²²⁰ Another study evaluating the impact of safe injection sites found that these sites were associated with reduced public injection drug use, as well as reduced public syringe disposal.²²¹ The lack of research examining the efficacy of safe injection sites nonetheless suggests that more research needs to be done to understand their healthcare and economic costs and benefits.

Recommendation

- The lack of research into the efficacy of safe injection sites suggests that, before recommendations can be made regarding them, rigorous research should be conducted on existing sites in other states and countries.

SUMMARY

The opioid epidemic in the United States emerged from a complex mix of causes and consequently requires complex and diverse remedies. Although Texas has seemingly avoided some of the worst consequences of this epidemic thus far, it still has been hard hit by opioid misuse and some research points to potentially worsening problems in coming years.

This report has outlined some of the possible legislative and policy solutions that Texas might pursue in the areas of Prevention, Treatment, and Harm Reduction to reverse the tide of the opioid epidemic. The goal of this report has been to provide legislators with options for how to address the opioid problem in all of its many, troubling manifestations.

Notes

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Appendix 1: Recommended Strategies from Other States

Arizona

Recommended Strategies	
1. Access to treatment:	
(1) Require licensed behavioral health residential facilities and recovery homes to develop policies and procedures that allow individuals on Medication Assisted Treatment (MAT) to continue to receive care in their facilities.	
(2) Require healthcare institutions to refer a patient to behavioral health services after treatment of an overdose.	
(3) Require the Arizona Department of Health Services (ADHS) to collect information on inpatient and outpatient treatment facilities, identify gaps in access to treatment, and publish a public report with recommendations for improving access to treatment. Requires each treatment facility to submit a quarterly report that includes information regarding the number of days in the quarter that the facility was at capacity and unable to accept referrals for treatment.	
(4) Close the access to treatment gap: This legislation includes an appropriation of \$10M that will go to providing treatment for uninsured or underinsured Arizonans in need of treatment.	
2. Access to Naloxone: Authorize these ancillary law enforcement and county health departments to administer Naloxone.	
3. Prevent addiction for Arizona youth:	
(1) Require ADHS to create an opioid abuse prevention education initiative.	
(2) Appropriate dollars to the Attorney General for the purpose of awarding grants for community opioid education and prevention efforts.	
4. Target bad actors:	
(1) End pill mills: Eliminate the practice of dispensing opioids on site, except for those opioids prescribed as part of medication assisted treatment. Provide ADHS, the Medical Boards and the Nursing Board with the ability to adopt rules to limit these practices.	
(2) Increase oversight and accountability: Provide medical licensing boards access to prescribing data, to check for bad actors in the system.	
(3) Holding manufacturers accountable: Enact criminal penalties for manufacturers who defraud the public about their products.	
5. Good Samaritan law: Enact a “Good Samaritan” law to encourage people to call 911 for a potential opioid overdose.	
6. Angel initiative: The Initiative allows citizens to walk into a police precinct, turn in their drugs and request treatment without fear of prosecution. Assistance is also provided to parents to secure safe placement for their child while they are in treatment, in lieu of placing their child in the foster care system.	
7. Prescriber education:	
(1) Require at least three hours of opioid-related Continuing Medical Education (CME) for doctors who are licensed to prescribe opioids.	

- (2) Require medical students to receive three hours of opioid related courses to ensure they are equipped with the most current information about prescribing opioids.
8. E-prescribing: Require e-prescribing by 2019 for drugs that have a high potential for abuse, such as OxyContin and morphine, commonly referred to as Schedule II drugs to mitigate fraudulent prescriptions. E-prescribing allows medical officials to write and transmit prescriptions to a pharmacy electronically. The Board of Pharmacy may provide a waiver for doctors that face hardships that prevent implementing e-prescribing.
9. Response dosage limits: Limit opioid dose levels to less than 90 MME/day for most patients, with exemptions that protect the following:
- (1) This does not apply to a continuation of a prior prescription order that was issued within the previous 60 days. The limit also would not apply to cancer patients, trauma patients, burn patients, hospice, end-of-life care, or medication-assisted treatment for substance use disorder.
 - (2) If a doctor believes it is medically necessary for a patient who does not meet one of the above exemptions to receive a daily dose above 90 MME, the doctor may do so if he or she consults with a board-certified, fellowship trained pain specialist who approves the recommendation. Consultation may be completed by telephone or through telemedicine. If a consulting physician is unavailable for consultation within 48 hours, the requesting health professional may prescribe in excess of 90 MME and subsequently have the consultation.
 - (3) If a doctor is board-certified in pain management, the doctor does not require consultation for prescribing in excess of 90 MME.
10. 5-day limit on first fills:
- (1) Place a 5-day limit on initial opioid prescriptions. The limit would not apply to individuals suffering from chronic pain who are already working with their physician on a pain management program.
 - (2) This limit would also exempt cancer patients, patients who experience a traumatic injury, surgery patients, continuation of a prior prescription order, hospice care, end-of-life care, palliative care, nursing care facilities, and infants being weaned off opioids at the time of hospital discharge.
11. Expedite prior authorization:
- (1) Require insurance companies to provide responses to prior authorization requests within five days for urgent cases and 14 days for non-urgent cases, reducing the time in which a patient is reliant on an opioid prescription.
 - (2) Require insurance providers to identify medication assisted treatment options that are available without prior authorization
12. Opioid packaging: Require different labeling and packaging for opioids (“red caps”). By changing the color of the caps and adding an addiction warning label, patients will have a clear warning and be able to make more informed decisions about the medication they choose to take.
13. Stop doctor shopping:
- (1) Require pharmacists to be the last line of defense to check for multiple prescribers and other prescriptions that increase the chance of an overdose.
 - (2) Place limits on initial fills of an opioid or benzodiazepine if dispensed from the veterinarian’s office, and require veterinarians to report suspected cases of doctor shopping to law enforcement authorities.
14. Prevent illegal use: Establish authority for hospice providers to properly dispose of opioids to prevent diversion.

California

Recommended Strategies
<p>The statewide overarching strategy includes five main components: (1) Safe Prescribing; (2) Access to Treatment; (3) Naloxone Distribution; (4) Public Education Campaign; and (5) Data Informed/Driven Interventions. In response to the national Opioid epidemic, the California Department of Public Health (CDPH) Director and state partners launched a state agency Statewide Opioid Safety Workgroup in 2014 to share information and develop collaborative prevention strategies to curb prescription drug overdose deaths and addiction in California. Additionally, the Workgroup provides a platform for state entities working to address opioid overdose and addiction to improve coordination and expand joint efforts. The Prescription Drug Overdose Prevention (PDOP) Initiative funded by the CDC grants supports and facilitates the statewide Workgroup and four Taskforces. Current PDOP Initiative activities include:</p> <ol style="list-style-type: none"> 1. Promote the CDC and Medical Board of California Prescriber Guidelines and registration and use of California’s Prescription Drug Monitoring Program – CURES. 2. Provide education and support to health payers and providers on best institutional prescribing policies and practices. 3. Conduct a “Policy” Environmental Scan to identify current laws, regulations, and policies that best address opioid overdose and addiction prevention. 4. Contract with the San Francisco Department of Public Health and Keck School of Pharmacy to develop Opioid Stewardship Curriculums to be rolled out in early April 2017 in three northern California counties: Humboldt, Lake, and Shasta. The curriculums will be utilized to train professionals to conduct “academic detailing” (or educational outreach) with prescribers (physicians, physician assistants, and nurse practitioners) and pharmacists on safe opioid prescribing practices. 5. Provide funding to support thirteen Opioid Safety Coalitions. 6. Develop a statewide media education campaign for California patients and consumers. 7. Provide data, technical assistance, and support to local health departments, coalitions, and community members in translating overdose and related data into actionable information to address the opioid prescription/illicit drug problem locally. 8. Convene a taskforce to address maternal and neonatal opioid exposure issues.

Source: The website of California Department of Public Health.

Recommended Strategies
<ol style="list-style-type: none"> 1. Prevention: <ol style="list-style-type: none"> (1) Support substance use prevention curricula in schools. (2) Mandate pain management, safe prescribing and addiction training for all prescribers. (3) Partner with federal government regarding graduate medical education (4) Require manufacturers and pharmacies to dispose of unused prescription medication. (5) Require prescribers to discuss opioid side effects at point of prescription. (6) Allow partial refills across all payers. (7) Eliminate prescription refills by mail for schedule II medications. (8) Amend the curriculum for teachers as state universities to include training on screening and intervention techniques. (9) Have state universities develop substance use prevention curricula for schools. (10) Support alternate pain therapies through commercial and public insurers & prepare a public report on what non-pharmacological treatments for pain are covered by all private and public insurers. 2. Intervention: <ol style="list-style-type: none"> (1) Improve the PMP to ensure data compatibility with other states. (2) Develop training on neonatal abstinence syndrome and addiction for DCF staff. (3) Improve affordability of Naloxone. (4) Increase access to beds for section 35 patients. (5) Implement electronic prescribing for opioids. (6) Increase screening for substance use at all points of contact in the medical system. (7) Increase the use of screenings in schools to identify at-risk youth for behavioral health issues. (8) Improve the PMP by interfacing the PMP with electronic health records. 3. Treatment: <ol style="list-style-type: none"> (1) Create a consistent public behavioral health policy through licensing reforms. (2) Pilot providing patients with access to an emergent/urgent addiction assessment by a trained clinician and direct referral to the appropriate level of care. (3) Increase points of entry to treatment. (4) Ensure section 35 patients receive a continuum of care. (5) Enhance provider accountability by requiring treatment programs to report on outcomes. (6) Reform purchasing of substance use disorder treatment services. (7) Require DPH to advance standards of care by establishing industry benchmarks. (8) Add new non-ATS/CSS treatment beds. (9) Establish and promote a longitudinally based system of addiction care. (10) Integrate primary care into substance use treatment programs. 4. Recovery: <ol style="list-style-type: none"> (1) Fund patient navigators and case managers. (2) Leverage community coalitions to address opioids. (3) Ensure all infants with NAS are referred to early intervention by time of hospital discharge. (4) Increase drug and specialty court capacity. (5) Expand peer/family support. (6) Partner with businesses to remove employment barriers that recovering individuals experience. (7) Reduce stigma among medical and treatment professionals.

Source: *Recommendations of Governor's Opioid Working Group*, 2015.

Recommended Strategies
<ol style="list-style-type: none"> 1. Prevention: <ol style="list-style-type: none"> (1) Convene experts to improve prescription practices through the Opioid Prescribing Improvement Program. (2) Track prescriptions and taking action through the Prescription Monitoring Program (PMP). (3) Limit opioid prescriptions and provide guidance to providers. (4) Establish rules to support good prescribing practices. (5) Provide access to meaningful, reliable data. (6) Build capacity of health care and other service providers through opioid abuse prevention pilot projects. (7) Awareness campaigns and educational materials: State agencies are working collaboratively to develop and distribute information to the public. (8) Provide funds to support local prevention efforts. (9) Improve and enhance the Prescription Monitoring Program (PMP) to reduce opioid over-prescribing. 2. Emergency response: <ol style="list-style-type: none"> (1) Allow more people to administer Naloxone. (2) Distribute Naloxone to emergency medical services. (3) Increase access to Naloxone in rural and tribal communities. (4) Allow people to get Naloxone at pharmacies. (5) Develop a way to track opioid overdoses by tracking Naloxone use; communicate information to communities and officials. (6) Connect emergency response to support and services for people who overdose. 3. Treatment and recovery: <ol style="list-style-type: none"> (1) Streamline and modernize the state's substance use disorder treatment system. (2) Expand Medication-Assisted Treatment (MAT) for opioids. (3) Increase integrated care for high-risk pregnancies. (4) Provide resources to medical practitioners: Funds from the State Targeted Response grants program are supporting providers to expand the Extension for Community Healthcare Outcomes (ECHO) infrastructure. ECHO sites across Minnesota engage medical practitioners in collaborative learning sessions, where participants discuss patient needs and evidence-based assessment and management approaches. (5) Enhance care coordination and innovative, culturally supportive practices. (6) Improve access to recovery programing in schools. (7) Expand local community integration to improve the treatment response to the opioid crisis. 4. Law enforcement: <ol style="list-style-type: none"> (1) Connect health and law enforcement: The Department of Human Services supports a collaborative effort in Greater Minnesota between a healthcare organization and local law enforcement to encourage people to seek treatment. (2) Support multijurisdictional task forces: The Department of Public Safety provides grants and technical assistance to Violent Crime Enforcement Task Forces (VCETs) that address narcotics, gang, and related violent crime. (3) Provide accurate information on controlled substances: The Department of Public Safety's Bureau of Criminal Apprehension tests evidence that may contain controlled substances.

- (4) Help offenders access treatment and recovery services: The Department of Corrections has an action plan to increase access to treatment for offenders, including identifying offenders with opioid use disorder, developing and implementing release plans (including access to Medication-Assisted Treatment), educating staff and offenders on treatment, and gathering and analyzing data on treatment.
- (5) Focus treatment efforts on underserved populations in the criminal justice system: Through the state's targeted grant program, organizations are providing outreach and treatment to populations that may not be reached through conventional approaches.
- (6) Support drug courts across the state: Drug courts in Minnesota are currently supported by federal and state funding through the Minnesota Judicial Branch, the Departments of Human Services and Public Safety, and county governments. Drug courts also receive in-kind support through local governments and the private sector.

Source: *Minnesota's Opioid Action Plan*, 2018.

Mississippi

Recommended Strategies
<ol style="list-style-type: none"> 1. Address the healthcare provider community: <ol style="list-style-type: none"> (1) The University of Mississippi Medical Center facilities should work with the Pharmacy Board and the Mississippi Prescription Monitoring Program (MPMP) to make sure all prescriptions for scheduled medications are reported daily to the MPMP. The MPMP should reflect the name and location of the provider who wrote the prescriptions. All physicians in training in the state of Mississippi, regardless of PGY level, should have their own DEA number. Each faculty member at the school of medicine and in every training program should have their own DEA number. (2) All VA facilities in the state of Mississippi should work with the Pharmacy Board and the MPMP to make sure all prescriptions for scheduled medications are reported daily to the MPMP. The MPMP should reflect the name and location of the provider who wrote the prescription. (3) Coroners should have adequate training and support in order to facilitate the recognition of reporting any drug overdose in a timely manner. All coroners should be members of the State Coroner's Association. (4) Providers should be discouraged from writing more than a 3 day supply of opioids for acute non-cancer pain, and shall not provide greater than a 7 day supply for acute non-cancer pain. (5) Benzodiazepine prescriptions should be limited to 1 month with no more than 2 refills. MPMP should be checked each time a prescription for benzodiazepines is written. (6) Point of service drug testing should be done each time a Schedule 2 medication is written for the treatment of chronic non-cancer pain. Point of service drug testing should be done at least every 90 days for patients on benzodiazepines for chronic medical and/or psychiatric conditions. (7) Pharmacists shall work closely with the providers and should be more vigilant when filling prescriptions for excessive amounts of Schedule 2 medications and/or benzodiazepines. The provider should be contacted when the pharmacist suspects "doctor shopping" is in play or when the patient is getting large quantities of opioids and/or benzodiazepines.

- (8) All dentists with a license should be required to register with the MPMP and all dentists should be required to receive at least 5 hours of continuing dental education every 2 years on prescribing opioids and/or benzodiazepines.
 - (9) Any healthcare provider licensed by a regulatory board in the state of Mississippi should register with the MPMP. Any medical, nursing, and/or dental provider in the state of Mississippi, who has an active DEA number, should receive a minimum of 5 hours continuing education every 2 years on prescribing opioids and/or benzodiazepines.
 - (10) MPMP should be run at each patient encounter in which a Schedule 2 opioid and/or benzodiazepine is written. Benzodiazepines may be written with 2 refills, which would mean that the MPMP should be checked every 90 days for benzodiazepines.
 - (11) There should be increased access to and funding for treatment facilities, programs, and medically assisted treatments for opioid and/or benzodiazepine addiction.
 - (12) The Mississippi Legislature should consider a surcharge on each pharmaceutical company who sells and/or provides Schedule 2 and/or Schedule 3 medications to the state of Mississippi. This could be a flat surcharge or could be volume driven. Funds collected should be dedicated to the diagnosis, education, and/or treatment of addiction to prescription medications.
 - (13) Methadone should rarely, if ever, be written to treat chronic and/or acute non-cancer pain. Encourage all regulatory boards to investigate providers who treat chronic and/or acute non-cancer pain with methadone.
 - (14) The use of long-acting opioids for the treatment of acute non-cancer pain should be discouraged.
 - (15) Require all Hospice services to have a standardized program for the collection and disposal of all medications at the time of a patient's death. Hospice providers should also have a standard mechanism to track and record all Scheduled medications written for the patients.
 - (16) Strongly discourage the use of opioids and benzodiazepines concomitantly.
 - (17) Dosages larger than 50 morphine mEq per day increases risk without adding benefits for pain control or function. Clinicians should avoid increasing dosages to greater than 90 morphine mEq per day.
 - (18) All wholesalers permitted by the Mississippi Board of Pharmacy shipping Schedule 2 through 5 medications within or into Mississippi shall report data to the Mississippi Prescription Monitoring Program.
2. Improve law enforcement and prosecutorial functions:
- (1) Provide an increased punishment for persons who sell, or possess with the intent to sell, heroin and/or fentanyl and/or fentanyl derivatives, and an enhanced sentence of 40 years to life for persons illegally selling or transferring controlled substances that result in death (or serious bodily injury).
 - (2) Exclude persons from entering Drug Court who are before the court on a pending sale of controlled substance charge.
 - (3) Enforce a law requiring that health-care providers, coroners and law enforcement officers shall notify Mississippi Bureau of Narcotics (MBN) of any death caused by a drug overdose.
 - (4) Training should be provided to all Law Enforcement Officers and Emergency Medical Technicians regarding the dangers of contact with Fentanyl and the use of Naloxone (Narcan) to prevent death from overdose.
 - (5) The dropbox program for excess controlled substance medications should be expanded and a public service campaign should be initiated to inform the public.

- (6) All coroners/medical examiners are required to utilize the Mississippi Crime Lab and be members of the MSS Coroners/Medical Examiner Association.
 - (7) When responding to a death, authorization needs to be granted to coroners and medical examiners for the retrieval and delivery of pharmaceuticals to law enforcement for disposal.
 - (8) Due to inadequate staffing within the Mississippi Crime Lab, and the 1,000+ pending laboratory cases that are currently greater than 30-days old, additional staffing is paramount. The Crime Lab should be bolstered with the following:
 - Toxicology- 2 forensic scientist trainees.
 - Drug Chemistry- 2 forensic scientist trainees.
 - Medical Examiner- 2 PINS.
3. Enhance education, prevention and treatment:
- (1) Design an integrated data collection and reporting platform that interfaces with primary data sources to ensure accuracy and speed while eliminating redundant reporting among multiple agencies.
 - (2) Encourage multi-agency coordination to implement a state-wide media campaign raising awareness of the negative effects of opioid and heroin by utilizing: 1) Public Service Announcements; 2) Billboards; 3) Town hall meetings; 4) State agency websites; and 5) School presentations. The media campaign should include the following components:
 - Signs and symptoms of addiction.
 - Education for individuals that addiction is a public health issue.
 - Information on the risks of sharing prescription medication.
 - Warning on how easily addiction can develop including addiction through prescribed use.
 - Signs to recognize and respond to an overdose and the administration of naloxone.
 - Best practices for prescribing opioids for pain management.
 - Clear and concise guidance on the safe home storage and appropriate disposal of prescription opioid medication.
 - Mississippi's Good Samaritan Law.
 - Information on accessing treatment and recovery support services state-wide.
 - Methods to reduce the stigma of addiction.
 - Expand Civil Commitment Procedures and Compelled Treatment.
 - (3) Make system-level improvements to increase availability and use of naloxone:
 - State-level standing order to make naloxone available to all pharmacies.
 - Purchase Naloxone for law enforcement.
 - Provide training on proper administration of naloxone.
 - Track data to capture circumstances, location and outcomes of naloxone administration.
 - (4) Create a comprehensive MS Opioid Resource website with separate modules to provide information as follows:
 - Link to multi-agency data platform described above.
 - Prevention module to educate about the risks of opioid use and signs and symptoms of addiction.
 - Instruction on proper disposal of prescription medication including list of drop-box locations.
 - Resource guide for individuals to access treatment providers (including inpatient, outpatient, MAT, recovery support, and prevention specialists).

- Instructions on how to purchase and administer naloxone, including a list of pharmacies with available supply.
 - Link to complete prescribing guidelines for emergency room, medical, and dental professionals (including specialty populations such as OB/GYNs, geriatric, and sports medicine).
 - Link to Prescription Monitoring Program for medical, pharmacy, dental, and veterinary professionals.
- (5) Increase funding to expand statewide treatment bed capacity (state-operated alcohol and drug treatment facility, and community primary drug treatment) through grants, legislation, appropriations, etc.
 - (6) Expand access to medication-assisted treatment (MAT):
 - Educate treatment workforce on opioid use disorder and advantages of MAT.
 - Expand treatment services for pregnant women/parenting women.
 - Improve evidence-based programs within treatment facilities to reduce recidivism rate.
 - (7) Implement strategies to reduce barriers to opioid treatment:
 - Educate primary care providers to utilize Screening, Brief Intervention, and Referral to Treatment (SBIRT) for individuals who may present with a substance use disorder.
 - Facilitate training collaborative efforts among emergency departments, first responder, law enforcement, and Community Mental Health Center mobile crisis teams to develop multi-agency overdose response teams.
 - Collaborate with Department of Medicaid and third party insurance providers to expand coverage for MAT medications.
 - (8) Enhance and support the provision of peer and other recovery support services designed to increase treatment engagement and retention, and promote long-term recovery.
 - (9) Evaluate current Drug Court and Re-entry programs to enhance systems with expansion of best practices specifically designed for these justice-involved individuals.
 - (10) Establish or Partner with Recovery Community Organizations (RCO's), entities that work with law enforcement and medical personnel to assist in employment, education, housing, life skills, and recovery (Pilot Programs Already Being Established by the Re-Entry Council).
 - (11) Tax Incentives for employers willing to hire those actively working a program of recovery.
 - (12) Implement Recovery Support Services and Peer Support within Department of Corrections.
 - (13) Establish Crisis Intervention Centers.
 - (14) Provide for an increased revenue stream for treatment by taxing pharmaceuticals.
 - (15) Collaborate with the Insurance Commissioner to mandate more coverage be provided for treatment by the companies providing insurance in Mississippi.

Source: *Governor's Opioid and Heroin Study Task Force*, 2017.

Recommended Strategies
<ol style="list-style-type: none"> 1. Take an active role in community outreach and prevention education regarding the dangers of opioid abuse. This should include the further expansion of programs such as the R.A.C.E. project and drug prevention programs available. The R.A.C.E. project recently expanded to Taos County. Education about the dangers of prescription opioids must continue within the communities as an effective strategy. 2. Timely data collection from first responders regarding fatal and non-fatal overdoses within the communities where they respond. New Mexico HIDTA is in the early stages of piloting an OD tracking application, which will track overdose responses. 3. Forensic laboratories need to provide timely analysis of drugs found on overdose scenes for fentanyl and provide that information to law enforcement in an attempt to identify who and where the drugs are being sold to prevent additional overdoses. New Mexico HIDTA has provided funding to the Office of the Medical Investigator (OMI) to work toward this goal. 4. Expand capacity for treatment options such as Medication Assisted Treatment (MAT) for opioid addiction. These programs can be court ordered by working in closer collaboration with the doctors who provide these services. Law enforcement should avoid promoting residential treatment as the best treatment for everyone, and suggest seeking other alternatives as recommended by health care professionals. 5. Expand Drug Prevention Programs by diverting some non-serious drug offenders into treatment with court ordered programs. These programs can redirect offenders from jail and prosecution to treatment and social support including harm reduction and intensive case management. 6. Jail and Correctional Center based drug treatment programs should be expanded as a means to reduce relapse, reduce recidivism, and reduce criminality. 7. Continue with the training and deployment of Naloxone to all first responders within the state as well as to others who are likely to encounter a person who has overdosed. 8. Increase interdiction efforts on all highways, interstates, and the many modes of transportation within New Mexico. 9. Network with agencies that provide services such as public health agencies, treatment providers, and social service providers. Federal, state, and local agencies should be working together at all levels to address the problem. 10. House Bill 560 (New Mexico Forfeiture Law) needs to be re-addressed by the Legislature as it has already negatively impacted the size and scope of law enforcement operations and has modified currency smuggling behavior to the detriment of law enforcement. 11. Lawmakers should further review the Case Management Order and Bail Reform Act as they both have allowed criminal offenders back on the streets within Bernalillo County. The release of drug offenders only exacerbates the problem. 12. The state should continue to hold major pharmaceutical wholesale distributors liable for the role they have played in the opioid epidemic. The funds gained from these lawsuits should be used for drug treatment, drug prevention, drug education, and law enforcement initiatives. 13. Target and prosecute members of major drug trafficking organizations at the highest possible level and seize any and all assets gained as a result of their illegal activities.

14. Expansion of mandatory prescriber education. Encourage physicians to utilize alternative, non-opioid treatments for pain and provide the lowest effective doses with the fewest number of pills when prescribing opioid medications.
15. Enforce the use of PDMP with timely reporting response times. The use of the system should be simplified and user friendly for proper utilization.

Source: *Opioids: The Face of the Demon in New Mexico*, 2018.

New York

Recommended Strategies
<ol style="list-style-type: none"> 1. Prevention: <ol style="list-style-type: none"> (1) Limit an initial prescription of a Schedule II and III controlled substance to treat acute pain to a five day supply. (2) Create a continuing medical education program for practitioners with prescribing privileges. (3) Help prevent the abuse and diversion of opioid prescription drugs by ensuring patient access to abuse-deterrent opioids by prohibiting insurers from disadvantaging drugs approved by the FDA as abuse-deterrent. (4) Ensure proper opioid education to prescribed patients. (5) Direct the Department of Health to expand its reporting of opioid overdose data by tracking the number of opioid overdoses generally in addition the number of opioid overdose deaths. The Department is also required to examine data that examines areas of the State experiencing high rates of opioid overdoses and if any areas of the State have reduced overdose rates after receiving State resources or services. (6) Instruction of mental health, alcohol, drug and tobacco use in junior and senior high schools. (7) Patient counseling prior to issuing a prescription for a schedule II opioid. (8) Increase availability of naloxone by requiring certain chain pharmacies to register as an opioid overdose prevention program and allowing them to dispense and administer Naloxone without a prescription. (9) Require the Department of Health and the Office of Alcoholism and Substance Abuse Services to examine and report on the underreported and at risk populations, including but not limited to Native American Tribes and the effect the heroin and opioid crisis is having on those populations. 2. Treatment: <ol style="list-style-type: none"> (1) Require a credentialed alcoholism and substance abuse counselors (CASAC) to complete training in medication assisted treatment (MAT) as part of their continuing education requirement. (2) Remove a barrier to obtaining MAT by prohibiting managed care providers, under the medical assistance program, from requiring prior authorization for the dispensing of buprenorphine for treatment of opioid addiction. (3) Examine insurance coverage for medications approved by the FDA for use in Medication Assisted Treatment (MAT) of opioid addiction and examine the accessibility across the state to new treatment modalities.

- (4) Extend the amount of time a person can be involuntarily held for substance abuse disorder for emergency care from 48 hours to 72 hours and establishes criteria in which a person may be involuntary sent to treatment for a substance abuse disorder.
 - (5) Enable a court to order assisted outpatient treatment (AOT) for an individual with a substance use disorder who, due to his or her addiction, poses a threat to him or herself or others.
 - (6) Require the Department of Health and the Office of Alcoholism and Substance Abuse Services to examine and report on the most effective treatment modalities, including ideal settings, treatment length, and best practices for heroin and opioid addiction.
 - (7) Create and appoint an Ombudsman to assist individuals and families in obtaining appropriate insurance coverage for treatment services.
 - (8) Require all OASAS certified treatment providers to inform individuals receiving treatment and their families of their right to file an external appeal with the Department of Financial Services (DFS) and provide them with the means necessary to access such appeal.
 - (9) Require DOH and DFS to rigorously scrutinize the implementation of any conditions placed on accessing treatment.
3. Recovery:
- (1) Authorize the Office of Alcoholism and Substance Abuse Services to provide funding to substance use disorder and gambling programs operated by for-profit agencies.
 - (2) Establish the sober living task force charged with establishing best practice guidelines for sober living residences that illustrate the most appropriate and effective environment for persons recovering from a chemical dependency.
 - (3) Expansion of treatment options for judicial diversion participants.
 - (4) Expand access to judicial diversion programs.
 - (5) Encourage employment of recovering users.
 - (6) Require the Office of Alcoholism and Substance Abuse Services to enact the wraparound services demonstration program as required by Chapter 32 of the Laws of 2014, and use the results to create best practices for recovery services that shall be implemented by every provider of services in order to be certified by the Office. The demonstration program would provide services to adolescents and adults for up to nine months after the successful completion of a treatment program. These services would be in the form of case management services that address education, legal, financial, social, childcare, and other supports.
 - (7) Require the Department of Health and the Office of Alcoholism and Substance Abuse Services to examine and report on vital statistics related to heroin and opioid addiction including relapse rate, length of treatment, and what, if any, follow up care supports are in place upon discharge.
4. Enforcement:
- (1) Enhance penalties for the sale of controlled substances on park grounds and playgrounds.
 - (2) Facilitate the conviction of drug dealers.
 - (3) Expand the crime of operating as a major trafficker.
 - (4) Create Drug-Free Zones.
 - (5) Establish appropriate penalties as it relates to heroin sales.
 - (6) Enhance judicial access to juvenile records for determining judicial diversion program eligibility.
 - (7) Adds fentanyl to the controlled substance schedule.
 - (8) Establish Xylazine as a controlled substance.

- (9) Establish the crime of homicide by sale of an opioid controlled substance.
- (10) Establish a formula to disperse funds acquired from the seizure of assets used in the commission of drug crimes.

Source: *Joint Senate Task Force on Heroin and Opioid Addiction*, 2016.

Vermont

Recommended Strategies
<ol style="list-style-type: none"> 1. Leadership required: <ol style="list-style-type: none"> (1) Develop a continuum of care from pre-birth to at least three years of age that supports a two-generation approach for pregnant women with SUD and their children and families by connecting programs within and across the agency of human services and health care providers. (2) Grow and support Vermont's workforce: Employ Vermonters in recovery and expand the SUD workforce. (3) Improve Vermont's statewide data collection and analysis capability to access and improve outcomes for intervention, treatment and recovery services. 2. Prevention, education and intervention strategies: <ol style="list-style-type: none"> (1) Implement a statewide comprehensive system for delivery of school-based primary prevention programs. (2) Ensure full participation among providers in the Vermont Prescription Monitoring System (VPMS). (3) Ensure all prescribers and those in training to prescribe, receive training on alternatives to opioids for pain management, including non-pharmacological options, and on patient education regarding options and risks in pain management. (4) Expand screening, brief intervention and referral to treatment (SBIRT) throughout primary care, emergency departments, in corrections and schools – for all from pre-kindergarten through elders. (5) Build, replicate, and support strong community-based models through multi-sector partnerships, innovation, and research resulting in outcomes that exceed previous, less collaborative efforts. (6) Create a statewide prevention messaging campaign designed to raise public awareness, reduce stigma, provide hope for families, and strengthen resilience in Vermont's communities. (7) Expand Vermont's syringe exchange programs and services to increase geographic reach and hours of operation. Support access to increased case management services for all participants. (8) Supply with naloxone, and provide effective training to all Vermont law enforcement, EMS, and people likely to be near a person who may overdose. (9) Expand current drug disposal options and events, and increase public participation across the state. (10) Create a statewide strategy and community toolkit to improve collection and disposal of sharps. 3. Treatment strategies:

- (1) Continuously support, evaluate and improve upon Vermont's Hub and Spoke system for opioid treatment to sustain, and expand where needed, Hub and Spoke treatment services across the state.
- (2) Expand access to medication-assisted treatment (MAT) in all Vermont correctional facilities.
- (3) Maximize the use of non-pharmacological approaches (integrative health care professions) for pain management, and for SUD treatment and recovery.
- (4) Support the Vermont judiciary's plan to explore expanded access to treatment Docket techniques.
- (5) Support the National Governors' Association recommendation to expand Medicare and Medicaid coverage for opioid treatment.
4. Recovery strategies:
 - (1) Ensure Vermont has a strong statewide network of recovery centers, recovery coaches, and supports, and that each regional recovery center has the capacity to deliver programs and services to individuals in recovery, their families, and loved ones.
 - (2) Expand the availability of ad equal access to recovery housing; explore expansion of the Department for Children and Families' (DCF) family supportive housing program to ensure individuals and families throughout Vermont have access to a stable home environment.
 - (3) Expand Vermont's recovery coach workforce.
5. Enforcement strategies:
 - (1) Support research, development, and court admissibility of a simple, accurate and cost-effective roadside testing method for drugged driving.
 - (2) Increase Vermont's resources for drug trafficking investigations.
 - (3) Provide drug recognition training for all law enforcement, first responders, and increase the number of drug recognition experts.

Source: *Initial Report of Recommended Strategies*, 2018.

Washington

Recommended Strategies
<ol style="list-style-type: none"> 1. Address significant gaps in public awareness about the dangers of opioids, as well as less risky alternatives available: <ul style="list-style-type: none"> • Expand statewide, coordinated education and outreach efforts. 2. Prevent addiction by curtailing overprescribing: <ul style="list-style-type: none"> • Establish limits on the amount of opioids initially prescribed. • Require patients to acknowledge that they have been informed about the dangers of opioids upon initial prescription. • Support requirements or incentives for alternative pain management treatments. 3. Reduce the illicit use of prescription opioids: <ul style="list-style-type: none"> • Require providers to consult the Prescription Monitoring Program before prescribing certain controlled substances. • Eliminate paper prescriptions. • Create a statewide medicine take-back system. • Enable investigators in Washington's Medicaid Fraud Control Unit to be appointed as limited authority peace officers for Medicaid fraud investigations.

4. Disrupt and dismantle organizations responsible for trafficking narcotics:
 - Restore resources for multi-jurisdictional drug-gang task forces
5. Prevent further increases in overdose deaths from fentanyl:
 - Adopt enhanced criminal penalties for trafficking of fentanyl and fentanyl analogues.
6. Improve overdose reporting and information sharing:
 - Direct resources towards more timely analysis of samples at the Washington State Toxicology Laboratory.
 - Require emergency medical service providers to report patient care information, including treatment of overdoses.
 - Require law enforcement officers to report naloxone administrations.
7. Expand access to addiction treatment:
 - Support and expand statewide and local non-traditional law enforcement approaches, such as drug courts, Law Enforcement Assisted Diversion, and embedded social workers.

Source: *Reducing the Supply of Illegal Opioids in Washington State*, 2017.

Wisconsin

Recommended Strategies
<ol style="list-style-type: none"> 1. Legislation and statutes: <ol style="list-style-type: none"> (1) Legislation permitting school personnel such as school nurses to administer an opioid antagonist such as Naloxone to a student on school premises if a student overdoses while at school. (2) Cough syrup can sometimes contain the powerful opioid codeine, so it is recommended that schedule V controlled substances that contain codeine may only be dispensed with a prescription. (3) Permit UW's Office of Educational Opportunity to charter a recovery school so that students who need in-patient care can receive it without missing a semester or year of school. (4) Extend limited immunity to the person who overdosed. In order to help facilitate an expanded Good Samaritan law, it is recommended to amend the state statutes to permit relatives to commit a drug-addicted family member in the same fashion that is currently allowed for alcoholism. (5) Amend the rural hospital graduate medical training program funding statute to clarify that grant funds may support addiction fellowships within one of the specialty fields for which doctors may train. 2. Funding and programs: <ol style="list-style-type: none"> (1) The University of Wisconsin School of Medicine has a program to train physicians focused on prevention, treatment, and management of addiction. It is recommended to spend \$150,000 to fund two additional fellowships to train addiction physicians. (2) Child Protective Services at the county level have seen a significant surge in casework due to opioid-related child welfare cases. Additional state resources for Children and Family Aids will help counties hire the social work staff they need to care for these additional victims. (3) Build a "Recovery Corps" based on the AmeriCorps model. For \$60,000, 20 recovery specialists can be annually trained to serve at substance abuse and peer support sites.

- (4) Build a grant program to allow up to 25 hospitals with high rates of drug overdose care to hire in-house recovery coaches.
- (5) Support recovery coaches and peer specialists in community corrections settings with high concentrations of addict offenders.
- (6) Support the start-up of three new Medically assisted treatment (MAT) centers in underserved areas of the state.
- (7) Build an Addiction Treatment & Recovery Hotline at the Department of Health Services (DHS) could provide a single door to the wide range of services available.
- (8) Provide a doctor-to-doctor consultation service.
- (9) DHS can prepare training and resource kits for first responders to learn about best practices and community resources.
- (10) Regional Prevention Resource Centers support community coalitions focused on substance abuse prevention and treatment. Provide competitive Community Innovation Grants to implement the best treatment ideas developed by the community coalitions.
- (11) Expand the Screening, Brief Intervention, and Referral to Treatment (SBIRT) training program to more teachers, administrators, and school nurses.
- (12) Support education, training, and access through non-profits that serve high-risk populations.
- (13) Hire additional Criminal Investigation Agents at DOJ to focus specifically on drug traffickers operating in Wisconsin.
- (14) Expand Treatment and Diversion (TAD) programs to more counties and launch a pre-booking diversion pilot program to allow non-violent arrestees a treatment option that diverts them away from the criminal justice system and into support and healing in the community.
- (15) Create a director-level position within the Secretary's Office at DHS to develop the statewide needs assessment and strategic plan, work with agencies on rules and policies, work with insurers and Medicaid to improve access to services, speak across Wisconsin on addiction issues, review best practices in other states, and coordinate with parents, law enforcement, schools, and community groups to find the best ways for Wisconsin to lead the nation in the fight against addiction.
- (16) Fund three staff to operate a data analysis center.

3. Executive actions:

- (1) Department of Children and Families (DCF) should study how to integrate mental health and substance abuse awareness into its programs.
- (2) Department of Corrections (DOC) should develop a web-based training module on opioid abuse for DOC staff who work with inmates who may have potential, current, or past addiction issues.
- (3) DOC should work with DHS to better assess the number of fatal and non-fatal overdoses among DOC offenders by comparing DOC offender data with DHS vital records data.
- (4) DOC should develop better methods to evaluate and screen incoming inmates for opioid and drug abuse.
- (5) DOC should consider developing a recovery housing unit within an institution where inmates would voluntarily commit to living clean after release, participating in an addiction program, and supporting their fellow inmates in their common battle for healing.
- (6) DOC should continue with its pilot program administering Vivitrol to volunteer participants paroled in eight northeast Wisconsin counties.

- (7) DHS should improve Wisconsin's community substance abuse service standards to require all state-certified Alcohol and Other Drug Abuse (AODA) clinics to have Naloxone on-site to administer in the event of an overdose.
 - (8) DHS should work with doctors, hospitals, health systems, medical schools, and others to increase the number of physicians familiar with MAT.
 - (9) Department of Safety and Professional Services (DSPS) and its associated boards should evaluate, develop, and implement rules and procedures to ensure that the standards, investigatory practices, and discipline for all professions that prescribe, dispense, administer, and use opioids are as similar as possible to ensure consistency and fairness.
 - (10) DSPS and its associated boards should work with Wisconsin's professional associations to promote best practices for counseling and support services to assist regulated professionals fighting addiction issues. Similarly, DATCP should create a support service for licensed veterinarians.
 - (11) DSPS should work with the Controlled Substances Board (CSB) to promote information sharing among federal, state, and local agencies.
 - (12) DSPS should dedicate all necessary resources to ensuring the efficacy of the Prescription Drug Monitoring Program.
 - (13) DSPS should work with the Substance Abuse Counselor Certification Committee to revise the clinical hours requirements for counselors to better balance adequate training with workforce accessibility.
 - (14) Department of Workforce Development (DWD) should work with the Workers Compensation Advisory Council to incorporate best practices in opioid use based on data and strategies with a proven track record in other states.
 - (15) Department of Veterans Affairs (DVA) should ensure that its Division of Veterans Homes provides care in line with best practices for opioid prescription and pain management.
 - (16) DVA should promote public awareness among the veteran community of opioid-related resources.
 - (17) Wisconsin Housing and Economic Development Authority (WHEDA) should study expanding permanent supportive housing through Low Income Housing Tax Credits or other tools to provide homeless or inadequately housed individuals with substance abuse disorders the support they need to achieve and retain housing stability.
4. Best practices for industries and communities:
- (1) Law enforcement agencies should consider the IACP/NHTSA certificate to ensure that officers who pull over drugged drivers can spot the right signs and adopt appropriate responses.
 - (2) The Group Insurance Board should consider plan design modifications that ensure that all state employees and their families receive appropriate health insurance coverage for substance abuse services.
 - (3) Universities should continually review their curricula to ensure that the next generation of doctors, dentists, pharmacists, and veterinarians are aware of the best practices in pain management and opioid prescription.

Source: *Combating Opioid Abuse: A Report to Governor Scott Walker*, 2016.

PDMPs Authorized and Engaged in Sending Solicited and Unsolicited Reports to Health Care Providers and Patients

State	Prescriber				Dispenser (Pharmacy or Pharmacist)				Physician Assistant				Nurse Practitioner				Prescriber Delegate (Licensed or Unlicensed)				Dispenser Delegate (Licensed or Unlicensed)				Patient				Drug Treatment Provider			
	Authority		Engaged		Authority		Engaged		Authority		Engaged		Authority		Engaged		Authority		Engaged		Authority		Engaged		Authority		Engaged		Authority		Engaged	
	Sol.	Unsol.	Sol.	Unsol.	Sol.	Unsol.	Sol.	Unsol.	Sol.	Unsol.	Sol.	Unsol.	Sol.	Unsol.	Sol.	Unsol.	Sol.	Unsol.	Sol.	Unsol.	Sol.	Unsol.	Sol.	Unsol.	Sol.	Unsol.	Sol.	Unsol.	Sol.	Unsol.	Sol.	Unsol.
Alabama	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X													
Alaska	X		X		X		X		X		X		X		X		X				X				X		X					
Arizona	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X				X				X		X					
Arkansas	X	X	X		X	X	X		X	X	X		X	X	X		X		X		X		X		X		X					
California	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X		X		X		X					
Colorado	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X		X		X		X		X		X	
Connecticut	X	X	X	X	X	X	X	X	X	X	X		X	X	X		X															
Delaware	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X		X		X		X		X	
District of Columbia	X	X	X		X	X	X		X	X			X	X			X				X				X							
Florida	X	X	X	X	X	X	X		X	X	X		X	X	X		X		X		X		X		X		X					
Georgia	X		X		X		X		X		X		X		X		X		X		X		X		X		X					
Guam	X	X	X		X	X	X		X	X	X		X	X	X										X		X					
Hawaii	X	X	X	X	X	X	X		X		X		X		X																	
Idaho	X	X	X	X	X	X	X	X	X		X		X		X		X	X	X		X		X		X		X					
Illinois	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X				X				X		X		X		X	
Indiana	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X		X					X		X		
Iowa	X		X		X		X		X		X		X		X		X		X		X		X		X		X					
Kansas	X	X	X	X	X	X	X	X	X		X		X		X		X		X						X		X					
Kentucky	X		X		X		X						X		X		X		X		X		X									
Louisiana	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X		X		X		X					
Maine	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X		X		X		X		X		X	
Maryland	X	X	X	X	X	X	X	X	X		X		X		X		X		X		X		X		X		X		X		X	
Massachusetts	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X		X		X		X					
Michigan	X	X	X	X	X		X		X	X	X	X	X	X	X	X																
Minnesota	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X		X		X		X					
Mississippi	X	X	X		X	X	X		X		X		X		X		X		X		X		X		X		X		X		X	
*Missouri																																
Montana	X	X	X		X	X	X		X	X	X		X	X	X		X		X		X		X		X		X		X		X	
Nebraska	X		X		X		X		X		X		X		X																	
Nevada	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X		X		X		X					
New Hampshire	X	X	X	X	X	X	X	X	X		X		X		X		X		X		X		X		X		X					
New Jersey	X	X	X		X	X	X		X		X		X		X		X				X				X				X	X		
New Mexico	X	X	X	X	X	X	X		X		X		X		X		X		X						X		X					
New York	X	X	X		X	X	X		X	X	X		X	X	X		X		X		X		X		X		X		X		X	
North Carolina	X	X	X		X	X	X		X		X		X		X		X		X		X		X		X		X					
North Dakota	X	X	X	X	X	X	X	X	X	X	X		X	X	X		X				X				X	X	X		X		X	
Ohio	X		X		X		X		X		X		X		X		X		X		X		X									
Oklahoma	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X		X									
Oregon	X		X		X		X		X		X		X		X		X		X		X		X		X		X					
Pennsylvania	X	X	X		X		X		X				X				X				X				X							
Rhode Island	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				X				X	X	X					
South Carolina	X	X	X		X	X	X		X	X	X		X		X		X		X		X		X		X		X		X		X	
South Dakota	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X						X		X		X		X	
Tennessee	X	X	X		X	X	X		X	X	X		X	X	X		X		X		X		X		X		X					
Texas	X	X	X		X	X	X		X	X	X		X	X	X		X		X		X		X									
Utah	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X				X				X			
Vermont	X	X	X	X	X	X	X		X	X	X		X	X	X		X		X		X		X		X	X	X					
Virginia	X	X	X	X	X		X		X	X	X		X	X	X		X		X		X		X		X		X					
Washington	X	X	X		X	X	X		X	X	X		X	X	X		X		X						X		X					
West Virginia	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X									
Wisconsin	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X		X		X		X		X			
Wyoming	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				X				X	X	X	X	X	X	X	X

* Missouri does not have PDMP legislation

Research is current as of January 27, 2017

PDMP TTAC Website: www.pdmpassist.org

GUIDELINE FOR PRESCRIBING OPIOIDS FOR CHRONIC PAIN

IMPROVING PRACTICE THROUGH RECOMMENDATIONS

CDC's *Guideline for Prescribing Opioids for Chronic Pain* is intended to improve communication between providers and patients about the risks and benefits of opioid therapy for chronic pain, improve the safety and effectiveness of pain treatment, and reduce the risks associated with long-term opioid therapy, including opioid use disorder and overdose. The Guideline is not intended for patients who are in active cancer treatment, palliative care, or end-of-life care.

DETERMINING WHEN TO INITIATE OR CONTINUE OPIOIDS FOR CHRONIC PAIN

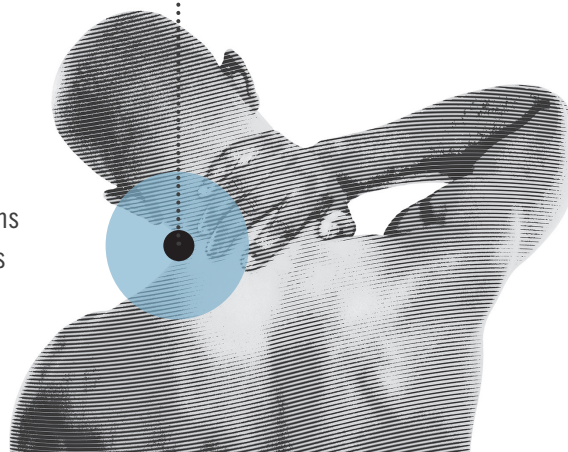
1 Nonpharmacologic therapy and nonopioid pharmacologic therapy are preferred for chronic pain. Clinicians should consider opioid therapy only if expected benefits for both pain and function are anticipated to outweigh risks to the patient. If opioids are used, they should be combined with nonpharmacologic therapy and nonopioid pharmacologic therapy, as appropriate.

2 Before starting opioid therapy for chronic pain, clinicians should establish treatment goals with all patients, including realistic goals for pain and function, and should consider how opioid therapy will be discontinued if benefits do not outweigh risks. Clinicians should continue opioid therapy only if there is clinically meaningful improvement in pain and function that outweighs risks to patient safety.

3 Before starting and periodically during opioid therapy, clinicians should discuss with patients known risks and realistic benefits of opioid therapy and patient and clinician responsibilities for managing therapy.

CLINICAL REMINDERS

- Opioids are not first-line or routine therapy for chronic pain
- Establish and measure goals for pain and function
- Discuss benefits and risks and availability of nonopioid therapies with patient



U.S. Department of
Health and Human Services
Centers for Disease
Control and Prevention

LEARN MORE | www.cdc.gov/drugoverdose/prescribing/guideline.html

OPIOID SELECTION, DOSAGE, DURATION, FOLLOW-UP, AND DISCONTINUATION

CLINICAL REMINDERS

- **Use immediate-release opioids when starting**
- **Start low and go slow**
- **When opioids are needed for acute pain, prescribe no more than needed**
- **Do not prescribe ER/LA opioids for acute pain**
- **Follow-up and re-evaluate risk of harm; reduce dose or taper and discontinue if needed**

4

When starting opioid therapy for chronic pain, clinicians should prescribe immediate-release opioids instead of extended-release/long-acting (ER/LA) opioids.

5

When opioids are started, clinicians should prescribe the lowest effective dosage. Clinicians should use caution when prescribing opioids at any dosage, should carefully reassess evidence of individual benefits and risks when considering increasing dosage to ≥ 50 morphine milligram equivalents (MME)/day, and should avoid increasing dosage to ≥ 90 MME/day or carefully justify a decision to titrate dosage to ≥ 90 MME/day.

6

Long-term opioid use often begins with treatment of acute pain. When opioids are used for acute pain, clinicians should prescribe the lowest effective dose of immediate-release opioids and should prescribe no greater quantity than needed for the expected duration of pain severe enough to require opioids. Three days or less will often be sufficient; more than seven days will rarely be needed.

7

Clinicians should evaluate benefits and harms with patients within 1 to 4 weeks of starting opioid therapy for chronic pain or of dose escalation. Clinicians should evaluate benefits and harms of continued therapy with patients every 3 months or more frequently. If benefits do not outweigh harms of continued opioid therapy, clinicians should optimize other therapies and work with patients to taper opioids to lower dosages or to taper and discontinue opioids.



ASSESSING RISK AND ADDRESSING HARMS OF OPIOID USE

8

Before starting and periodically during continuation of opioid therapy, clinicians should evaluate risk factors for opioid-related harms. Clinicians should incorporate into the management plan strategies to mitigate risk, including considering offering naloxone when factors that increase risk for opioid overdose, such as history of overdose, history of substance use disorder, higher opioid dosages (≥ 50 MME/day), or concurrent benzodiazepine use, are present.

9

Clinicians should review the patient's history of controlled substance prescriptions using state prescription drug monitoring program (PDMP) data to determine whether the patient is receiving opioid dosages or dangerous combinations that put him or her at high risk for overdose. Clinicians should review PDMP data when starting opioid therapy for chronic pain and periodically during opioid therapy for chronic pain, ranging from every prescription to every 3 months.

10

When prescribing opioids for chronic pain, clinicians should use urine drug testing before starting opioid therapy and consider urine drug testing at least annually to assess for prescribed medications as well as other controlled prescription drugs and illicit drugs.

11

Clinicians should avoid prescribing opioid pain medication and benzodiazepines concurrently whenever possible.

12

Clinicians should offer or arrange evidence-based treatment (usually medication-assisted treatment with buprenorphine or methadone in combination with behavioral therapies) for patients with opioid use disorder.

CLINICAL REMINDERS

- **Evaluate risk factors for opioid-related harms**
- **Check PDMP for high dosages and prescriptions from other providers**
- **Use urine drug testing to identify prescribed substances and undisclosed use**
- **Avoid concurrent benzodiazepine and opioid prescribing**
- **Arrange treatment for opioid use disorder if needed**