



Trajectories

Aim For Excellence

JULY 2017 ■ Opioid Use Disorder: Assessing and Treating a Chronic Illness

“We have to stop treating addiction as a moral failing, and start seeing it for what it is: a chronic disease that must be treated with urgency and compassion.”ⁱ

– Dr. Vivek H. Murthy,
former United States
Surgeon General



Each week, there is new research and another heartbreaking story that confirm what we know. The opioid crisis is real and affects every community and every age group. Babies born dependent, teenagers experimenting, working moms, grandparents — this epidemic reaches all of them.

In the 1990s, the trifecta of new pain medication, research about ineffective pain management, and policy changes to more aggressively and conveniently manage pain, resulted in the emergence of the opioid public health crisis.^{xii} There is no single solution to this complex issue that will require years to reverse. Instead, a multifaceted approach, including prevention, early detection and treatment, is required to reverse the trend of opioid use disorder and misuse. Ongoing research, such as the Hospital Industry Data Institute’s recent [HIDI HealthStats](#), is needed to understand the effect so that evidence-based changes to both policy and practice may be implemented.

Policy Changes to Reduce Opioid Misuse

On May 12, the 2017 regular session of the Missouri General Assembly concluded. During the session, numerous bills were introduced to address the opioid crisis. Among them, and most notably, were several bills to establish a prescription



Across the United States

- 78 Americans die every day from an opioid overdose.ⁱⁱ
- There has been a quadrupling of prescriptions for opioids since 1999,^{iv} but there has not been an overall change in the amount of pain that Americans report.^{iii, iv}
- As many as 1 in 4 patients receiving long-term opioid therapy in a primary care setting struggles with addiction.^v
- With an average cost of \$7,600 per hospital stay, the estimated cost of opioid-related stays for the uninsured tops \$58.5 million nationwide.^{vi}



In Missouri

- Approximately 1,000 Missourians die each year from drug-induced deaths and more than 500 of those deaths result from opioids.^{vii}
- An estimated 407,500 Missourians (7.94 percent) have a substance abuse disorder.^{viii}
- 206,300 Missourians (4.02 percent) report nonmedical use of pain relievers during the past year, a rate comparable to the U.S.^{ix}
- Missouri data suggest that there are 94.5 opioid pain reliever prescriptions written for every 100 people — higher than the national rate of 82.5 per 100.^x
- 75 percent of new heroin users report that their addiction began by abusing prescription opioids.^{xi}
- 43 percent of hospital patients with a heroin overdose death in 2016 had a history of hospital utilization for prescription opioid abuse during the previous four years.^{xi}

drug monitoring program — a web-based, HIPAA-secure repository of patient-specific, prescribed and filled narcotics. Ultimately, none of the PDMP bills passed and as a result, Missouri remains the only state without a PDMP. Despite this setback, [Senate Bill 501](#) was truly agreed to and finally passed addressing substance abuse through the following actions.^{xiii}

- Grants immunity from arrest, prosecution or other penalties for certain drug-related crimes if the evidence was gained in the course of seeking medical assistance for a drug or alcohol overdose.
- Permits the director of the Missouri Department of Health and Senior Services or a physician designee to issue a statewide standing order for the use of naloxone to blunt the effect of an opioid overdose.
- Revises standards for medication-assisted treatment of substance abuse.

PDMP

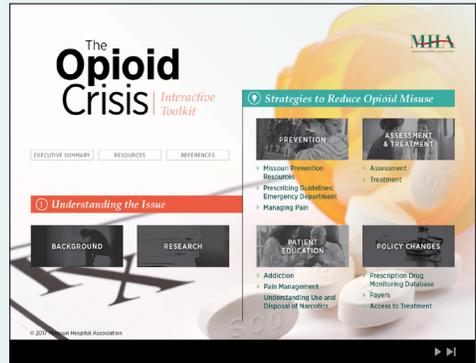
The goal remains to pass legislation that would enact a formalized statewide PDMP. Despite the failed passage of a statewide PDMP during the recent legislative session, progress has been made. Effective April 25, the St. Louis County Department of Public Health launched a PDMP not only for its residents, but also for any Missouri jurisdiction that passes an ordinance to participate in their program. Although not the most efficient method for a statewide system, the St. Louis County Department of Public Health has established the architecture needed. As of May 17, 2,300 providers in Missouri are registered and approved to use the St. Louis County system.^{xiv}

Information collected through a PDMP provides prescription fill history for controlled substances,

Opioid Crisis Interactive Toolkit

Many of the following resources are located in MHA's [opioid interactive toolkit](#).

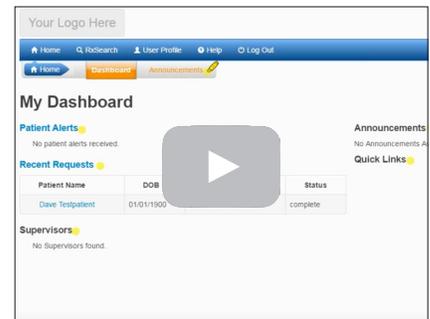
- [PDMP Checklist](#)
- [SOAPP-R Assessment Tool](#)
- [D.I.R.E. Assessment Tool](#)
- [MMWR](#) – Characteristics of Initial Prescription Episodes and Likelihood of Long-Term Opioid Use — United States, 2006-2015
- [CDC Prescribing Guidelines for Chronic Pain](#)
- [Missouri Emergency Department Opioid Prescribing Guidelines](#)
- [Prescriber Online Training: Applying CDC's Guideline for Prescribing Opioids](#)
- [American Medical Association's Guide to Using a PDMP](#)
- Opioid Patient Education Flyer #1: [Narcotic Disposal](#)
- Opioid Patient Education Flyer #2: [Prescribing](#)
- Opioid Patient Education Flyer #3: [Pain Management](#)
- [The Veteran's Administration Opioid Safety Initiative Toolkit](#)
- [The Mayo Clinic's Tapering Long-term Opioid Therapy in Chronic Noncancer Pain](#)
- [CDC's Pocket Guide: Tapering Opioids for Chronic Pain](#)
- [The ASAP National Practice Guideline](#)
- [ACOG Committee Recommendation No. 524, Opioid Abuse, Dependence and Addiction in Pregnancy](#)
- [North Carolina Pregnancy and Opioid Exposure Project](#)
- [Families in Crisis: The Human Service Implications of Rural Opioid Misuse Policy Brief July 2016](#)



PDMP Web-based Tutorial: Registering



PDMP Web-based Tutorial: Provider Dashboard



including opioids. Providers now may identify a patient with multiple opioid prescriptions following care from a primary care provider, dentist and emergency department visit. Such a patient may be developing an opioid dependency without awareness and, thus, the provider has the information and expertise to identify the risk and initiate discussion and possible treatment options.

Understanding Addiction as a Chronic Illness

Literature and research suggest that therapeutic care for patients with an addiction is similar to the constructs effective in managing chronic illness and disease.^{xv, xvi} Care coordination among primary care, specialty care and social services using evidence-based guidelines is necessary to treat the patient diagnosed with addiction, and often psychiatric and medical comorbidities (Figure 1).^{xv}

An early study by McLellen et al., published in the *Journal of American Medicine* in 2000, reviewed literature and examined data to suggest drug dependence should be treated as a chronic illness, rather than an acute illness, as has been precedent.^{xvii} The genetic heritability, environmental factors and personal choice that contribute to etiology of drug dependence as compared to type 2 diabetes mellitus, hypertension and asthma, suggest similar contributing factors among the different conditions. Further, medication adherence and relapse rates are similar across these illnesses.

Drug dependence produces significant and lasting changes in brain chemistry and function. Effective medications are available for treating opiate dependence and, thus, should be incorporated into the assessment and treatment regimen. Research

Four Out of 5 Heroin Addicts Start With Prescription Opioids

According to Sam Page, Physician Anesthesiologist from Mercy Hospital St. Louis, "I've certainly had patients in my practice that I would have never expected to have a problem with opioid addiction. They were very articulate, very appropriate, [and had a] very well-explained history for why they might need pain pills. But, then when we check with pharmacies, we find out that this patient is receiving prescriptions from three other physicians. We have to be careful about making assumptions – not only about who might be telling you the truth or might have a substance abuse problem, but also we want to be careful about making assumptions about who might be abusing opioids. The prescription drug monitoring program, along with other tools that we have, would give you the confidence to proceed with your clinical judgement."



The Role of Prescription Drug Monitoring Programs as Part of Improved Patient Care

Drug overdose deaths and opioid-involved deaths continue to increase in the United States. The majority of drug overdose deaths (more than six out of ten) involve an opioid.¹ Since 1999, the number of overdose deaths involving opioids (including prescription opioids and heroin) has quadrupled.² From 2000 to 2015, more than half a million people died from drug overdoses. Every day, 91 Americans die from an opioid overdose.

We now know that overdoses from prescription opioids are a driving factor in the 15-year increase in opioid overdose deaths. Since 1999, the amount of prescription opioids sold in the U.S. nearly quadrupled,² yet there has not been an overall change in the amount of pain that Americans report.^{3,4} Deaths from prescription opioids—drugs like oxycodone, hydrocodone, and methadone—have more than quadrupled since 1999.⁵

A Growing Problem

"I am asking for your help to solve an urgent health crisis facing America: the opioid epidemic. Everywhere I travel, I see communities devastated by opioid overdoses." United States Surgeon General Vivek H. Murthy, M.D., M.B.A.

WHAT SHOULD I CONSIDER WHEN PRESCRIBING OPIOIDS?



High Dosage



Multiple Providers



Drug Interactions

The Role of Prescription Drug Monitoring Programs (PDMPs)

- PDMPs collect data from pharmacies on controlled substance prescriptions that have been dispensed and make it available to authorized users by means of a secure, electronically-accessible database.⁶
- Research demonstrates that PDMPs serve an essential function in combating prescription drug abuse.^{7,8,9,10,11}
- PDMPs improve patient safety by allowing clinicians to identify patients who are obtaining opioids from multiple providers, calculate the total amount of opioids prescribed (MME), and identify patients who are being prescribed other substances that may increase the risk of opioid or adverse drug reactions.¹²





How to Register

- Visit missouri.pmpaware.net
- Create an account using your name, DEA number, and NPI
- Upload your professional license as a validation document
- Verify your current e-mail address
- Review 'Quick Links' on stlouisco.com/pdmp

Source: St. Louis County

suggests that long-term care strategies of medication management and continued monitoring produce lasting benefits. McLellen and colleagues portend drug dependence should be insured, treated and evaluated like other chronic illnesses.

It is important to consider the intersection of chronic illness with increased risk of infectious diseases, such as hepatitis and HIV, among vulnerable populations, including the impoverished and patients with a history of incarceration and behavioral health conditions.

Practice Changes to Address Addiction as a Chronic Illness

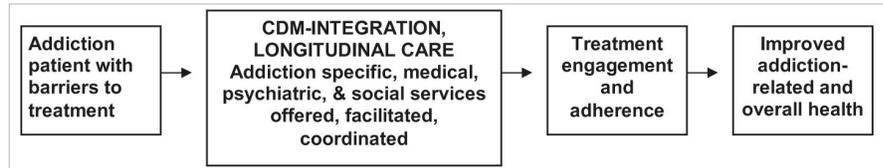
The following summaries provide a general overview and guidance for practitioners. More specific and expert knowledge is necessary to assess and treat patients at risk of opioid misuse.

Upstream Strategies for Prevention

Ultimately, as health care providers, the goal is to promote safe prescribing practices, accounting for risk factors related to a higher propensity for abuse, and to mitigate the risk of opioid addiction and subsequent poor outcomes. Safe prescribing starts with physicians and mid-level providers obtaining updated evidence-based education to inform themselves on risk factors, assessment tools, local resources and first-line pain treatment options. Adoption of evidence-based guidelines for pain management also is recommended, such as those published by the Centers for Disease Control and Prevention.

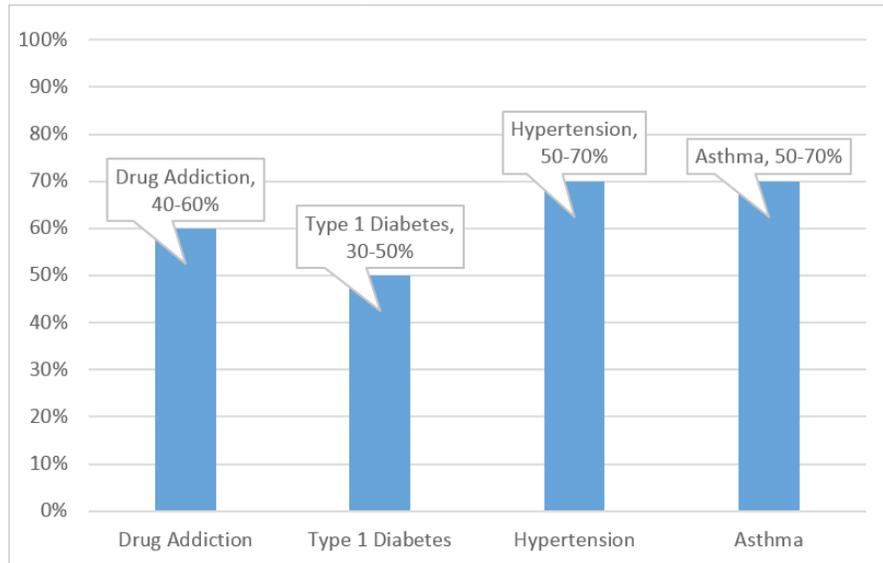
Secondly, the community must be educated on what it means to be safe when taking an opioid, including medication safety, adverse effect recognition and how to report it, how to manage breakthrough pain and

Figure 1: How Chronic Disease Management Can Improve Health for People With Addiction



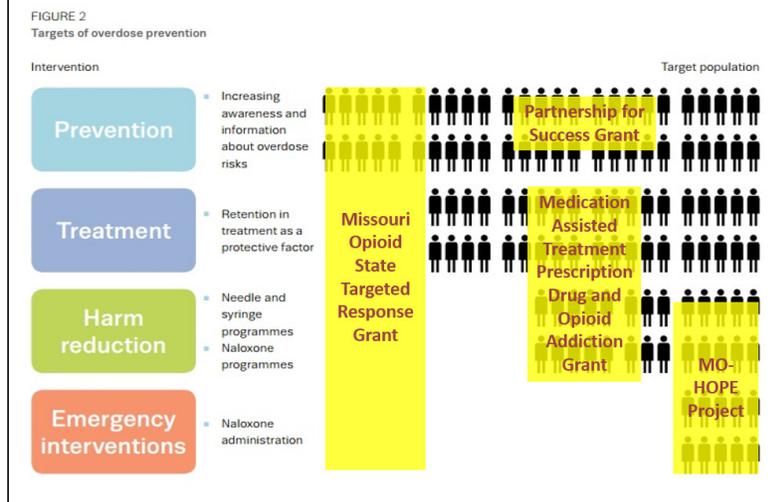
Source: *Journal of Addiction Medicine*, 2(2) 55-65, 2008.

Percent of Patients Who Relapse



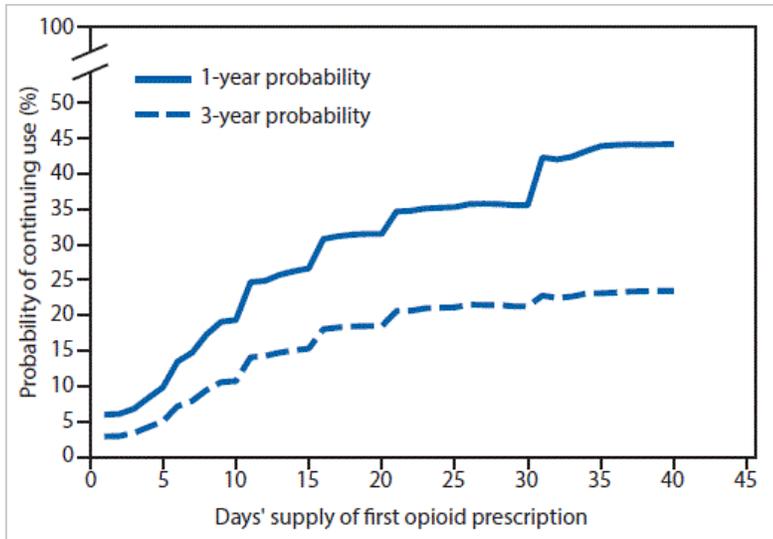
Source: *JAMA*

What's being done in Missouri



Source: Missouri Institute for Mental Health, University of Missouri – St. Louis

One- and Three-Year Probabilities of Continued Opioid Use Among Opioid-Naïve Patients, by Number of Days' Supply* of the First Opioid Prescription — U.S., 2006–2015^{xix}



Source: MMWR. *Days' supply of the first prescription is expressed in days (1–40) in one-day increments. If a patient had multiple prescriptions on the first day, the prescription with the longest days' supply was considered the first prescription.

what questions to ask their provider. Setting realistic expectations with patients regarding levels of pain relative to procedures and trauma is important — the idea of “zero” pain simply is not realistic. Healing is promoted best through judicious use of appropriate pain medications, with opioids being an option as needed, and early return to recovery and functionality. Pre-operative planning should include discussions on pain control options with a plan developed in collaboration between the surgeon and the patient. A shared plan is important, as a recent study in JAMA found that for opioid-naïve patients, many surgical procedures are associated with an increased risk of chronic opioid use in the postoperative period. A certain subset of patients (e.g., men, elderly patients) may be particularly vulnerable.^{xviii}

When an opioid medication is deemed the most appropriate prescription option, the use of assessment tools, such as the Screener and Opioid Assessment for Patients in

Pain-Revised (SOAPP-R), and the Diagnosis, Intractability, Risk and Efficacy (D.I.R.E.), provide a baseline, not a definitive prediction, for a patient’s likelihood of abusing opioids. Nationally, database tools like a PDMP, allow providers to view a patient’s prescription history across the care continuum before prescribing opioids. Both types of assessment tools open the door for two-way communication between providers and patients to discuss individual risk factors and recommendations, while formulating a plan that will be most effective. A recent CDC study noted that if the first prescription is for five or more days of opioid treatment, then the risk of addiction trends upward sharply, with longer-acting opioids causing higher addiction rates within just a few days.^{xix}

Mid-Stream Strategies to Identify At-Risk Patients

While prevention through safe prescribing practices is essential, many patients already live with an opioid

Critical Education Components for Effective Pain Management^{xx}

- General aspects of pain management
- Managing pain and co-morbid conditions
- How to ensure safe and appropriate prescribing of opioids
- Understanding aberrant drug-related behavior
- Formulating a treatment plan
- How to monitor patient compliance in clinical practice
- Teaching patients about medication safety
- Understanding the practical issues of addiction
- Understanding the importance of having a medical home
- Understanding the social impact of pain

addiction. Collaboration between the provider and patient is critical to success. Physicians, nurses, case managers and social workers all play an important role in assisting patients to manage their medical condition and formulate a tapering plan or minimize their use of opioids. A successful plan includes the following.^{xxi}

- Understanding how to manage the challenges of living with a chronic condition.
- Learning how to inform and activate patients to take responsibility for self-management using the skills of empathy and “motivational interviewing.”
- Using realistic goal-setting instead of a “silver-bullet” approach.
- Shared decision-making.

- Identifying responsibility.
- Identifying and using self-management strategies.

Another resource for providers is to use ongoing screening tools to re-assess the need for continued opioid therapy and risk for addiction. These tools, used at provider-defined intervals during opioid treatment, promote close monitoring of use and help identify when intervention is necessary. The Brief Pain Inventory and the Current Opioid Misuse Measure are two recommended tools.

Tapering opioids should be considered by the provider and patient if any of the following criteria are identified.^{xxii}

- patient requests dosage reduction
- patient does not have clinically meaningful improvement in pain and function (e.g., at least 30 percent improvement on the three-item PEG scale)
- patient is on dosages ≥ 50 MME/day without benefit or opioids are combined with benzodiazepines
- patient shows signs of substance use disorder (e.g. work or family problems related to opioid use, difficulty controlling use)
- patient experiences overdose or other serious adverse event
- patient shows early warning signs for overdose risk, such as confusion, sedation or slurred speech

A decrease of 10 percent of the original dosage per week is a reasonable starting point according to the CDC. Tapering is patient-centric — meaning the tapering dose, timeframe and intervals are based on close monitoring of the patient and their feedback.

Beyond the tapering regimen itself, physicians should consider monitoring patients for inadequate coping skills and withdrawal symptoms, both

of which require additional support through consultation and medical treatment. Increased pain, however, is not associated with tapering. In fact, according to studies of long-term opioid treatment tapers overall, patients report improvements in function without associated worsening pain^{xxiii, xxiv} or even decreased pain levels.^{xxv, xxvi}

Beyond tapering, the use of cognitive behavioral therapy techniques can be very effective in treating opioid addiction. The use of the Veteran’s Administration’s Opioid Safety Initiative Toolkit, has shown significant reduction in both use and adverse outcomes related to opioids since 2013.^{xxvii} A major component of the initiative was use of cognitive behavioral therapy to implement coping and management strategies.

Medication for opioid use disorder, often referred to as Medication Assisted Treatment, relieves the withdrawal symptoms and psychological cravings that cause chemical imbalances in the body, thereby increasing a patient’s ability to successfully manage opioid use disorder. MAT, to treat opioid use disorder, can help re-establish normal brain function, reduce cravings, prevent relapse, and lower the risk of contracting comorbid diseases.^{xxviii} MAT also reduces the likelihood of overdose and improves functioning and quality of life.

Recent empirical evidence actually states there are no specific psychosocial interventions found to effectively treat opioid use disorder. Instead agonist and partial agonist MAT (methadone and buprenorphine) have, without question, the biggest evidence base for opioid use disorder treatment; and, the longer people stay on it, the better the treatment outcomes.^{xxix}

In 2006, Missouri introduced reimbursement for FDA-approved medications for substance use disorder

treatment. The treatment system currently supports the provision of all FDA-approved MAT medications including oral naltrexone, extended-release injectable naltrexone, buprenorphine, buprenorphine/naloxone combinations and the buprenorphine implant. MAT medications are included on the state Medicaid formulary.^{xxviii} Medications used in MAT for opioid treatment only can be dispensed through a SAMHSA-certified opioid treatment program. Some of the medications used in MAT are controlled substances because of their potential for misuse, and include methadone, buprenorphine and naltrexone.

The Missouri Department of Mental Health and the University of Missouri – St. Louis have received \$10 million for the first year of a two-year, multimillion dollar State Targeted Response to the Opioid Crisis Grant from the Substance Abuse and Mental Health Services Administration.

Planned project activities include developing and expanding efforts related to prevention, treatment and recovery of opioid use and consequences. The grant will be overseen by the Missouri Department of Mental Health, Division of Behavioral Health, and administered and evaluated by a team at the Missouri Institute of Mental Health – University of Missouri – St. Louis. The development and implementation of a standardized protocol for medication-assisted treatment for opioid use disorder will be a large focus of this grant, with an emphasis on treating opioid use disorder within a chronic care model and increasing utilization of maintenance medication.

MHA has been approved to receive a subcontract to provide communication, coordination and education about the expanded services to Missouri hospitals and providers.

Definitions^{xxxii}

Medication Assisted Treatment – [MAT](#) is the use of medications in combination with counseling and behavioral therapies for the treatment of substance use disorders. A combination of medication and behavioral therapies is effective in the treatment of substance use disorders.

Morphine milligram equivalents – Higher dosages of opioids are associated with higher risk of overdose and death, even relatively low dosages. It is important to calculate the MMEs.

Opioid Misuse – Misuse of prescription drugs means taking a medication in a manner or dose other than prescribed; taking someone else's prescription, even if for a legitimate medical complaint such as pain; or taking a medication to feel euphoria (i.e., to get high).

Opioid Use Disorder – based on the 2013 Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association, an opioid use disorder is defined as the repeated occurrence within a 12-month period of two or more of 11 problems, including withdrawal, giving up important life events in order to use opioids, and excessive time spent using opioids. A cluster of six or more items indicates a severe condition.

PDMP – According to the National Alliance for Model State Drug Laws, a [PDMP](#) is a statewide electronic database that collects designated data on substances dispensed in the state. The PDMP is housed by a specified statewide regulatory, administrative or law enforcement agency. The housing agency distributes data from the database to individuals who are authorized under state law to receive the information for purposes of their profession.

Downstream: Treating Overdose

Opioid abuse has consequences beyond the individual patient. Financial, social and communitywide effects have been documented because of addiction issues. Children often are the unwitting victims of opioid addiction. As noted in the May 2017 [HIDI HealthStats](#), the rate of neonatal abstinence syndrome in Missouri alone rose more than 500 percent in less than a decade. NAS, when a newborn experiences symptoms of withdrawal, affects newborns whose mothers have used one or more controlled or illicit drugs during pregnancy. Anecdotally, the rate is believed to be significantly higher, and improved documentation and coding could enhance understanding of the significance of the issue. A CDC 2015 Morbidity and Mortality Weekly Report issue noted that more than one-third of reproductive age women on Medicaid and more than one-quarter of those with private insurance had filled an opioid prescription every year from 2008-2012, with a disproportion of those to non-Hispanic white

women. Opioid use in early pregnancy can lead to birth defects, such as congenital heart disease, as well as lead to months of care in a NICU setting.^{xxx} Evidence supports the use of methadone and buprenorphine in pregnant and postpartum women to support the health of both the mom and the baby. A collaborative decision between a patient and the provider should occur to best decide the need for inpatient treatment.

Use of drugs or alcohol by parents and other caregivers can have negative effects on the health, safety and well-being of children. Approximately 47 states, the District of Columbia, Guam, and the U.S. Virgin Islands, have laws within their child protection statutes that address the issue of substance use by parents. The negative effects on children either exposed to drug misuse or who experience neglect as a consequence of parental/caregiver addiction is a growing concern and is placing increasing stress on states' social services infrastructure.^{xxxi} When working to help patients with opioid use disorder or any addiction issue, attention should

be paid to the patient's entire social network and level of support needed.

Prescription Drug/ Opioid Overdose Award: MO-HOPE

The Missouri Opioid-Heroin Overdose Prevention and Education project is designed to reduce overdose events throughout the state of Missouri, with a focus on the eastern region — specifically St. Louis and the surrounding counties — through increased access to naloxone and overdose education. In 2016, Missouri was awarded a SAMHSA PDO grant to increase the number of professional first responders, medical and mental health professionals, and other groups trained to carry, prescribe and administer naloxone. Missouri's PDO program will train, at minimum, 3,600 professionals and laypersons and provide up to 36,000 doses of naloxone. Overdose education training and naloxone distribution has started in the eastern region where opioid deaths are highest, but will expand to other parts of the state.^{xxviii}

Suggested Citation

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