# Use of Medication-Assisted Treatment in Emergency Departments

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CHAPTER

1

ISSUE BRIEF:

# Use of Medication-Assisted Treatment in Emergency Departments


According to the 2019 National Survey on Drug Use and Health over 1.6 million people in the United States have an opioid use disorder.[1] Recent data from the Center for Disease Control and Prevention report that nearly 47,600 individuals died from an opioid drug overdose.[2] Overdose deaths from opioids, including prescription opioids, heroin, and synthetic opioids (like fentanyl) have increased nearly six times since 1999.[3]

Emergency departments (EDs) in the U.S. have felt the impact of this epidemic. The rate of opioid-related ED visits nearly doubled between 2005 and 2014, and the rate of opioid-related inpatient stays increased 64 percent.[4] In recent years, the availability and use of illicit fentanyl and fentanyl analogs have accounted for an increasing proportion of opioid overdose deaths (NIDA, 2019).[5]

While difficult to quantify, the number of nonfatal overdoses is also significantly higher. A recent study noted a mortality rate of 4.7 percent in the 12 months post-ED visit for individuals presenting with a nonfatal overdose. In addition, only one-third of patients were treated with MAT in the year following the ED visit, yet the mortality rate was significantly lower for these individuals.[6]

As the ED is often the only entry point into the healthcare system for individuals with opioid use disorder (OUD), the ED visit becomes a crucial opportunity to initiate evidence-based treatment with buprenorphine and referral.

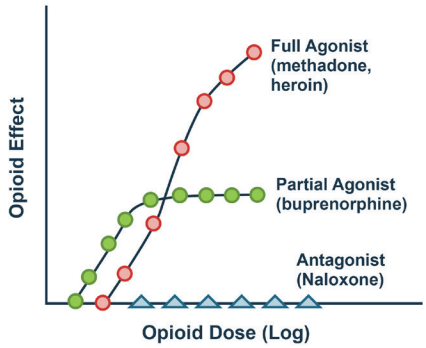
## Why the Emergency Department?

The ED is often the primary source of medical care for individuals with OUD. ED visits offer an opportunity to access life-saving treatment. Individuals may present after a nonfatal overdose, seeking treatment for their OUD, withdrawing from opioids, or with other complications of their disease, such as injection-related skin infections. Identifying individuals with untreated OUD enables providers to:

- Motivate individuals to accept treatment
- Effectively treat opioid withdrawal symptoms
- Initiate evidence-based treatment
- Refer individuals to ongoing care
- Reduce harm by offering overdose education and dispensing naloxone

# Medication-Assisted Treatment

MAT, also known as Medication for Opioid Use Disorder, includes three medications approved by the US Food and Drug Administration (FDA). These medication include: Methadone, buprenorphine, and naltrexone and are FDA-approved for the treatment of moderate to severe OUD. Diagnosis of moderate OUD is identified by meeting standards for at least four of 11 criteria described in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5). The medications are classified as to their effect on the opioid mu receptor (a receptor in the brain that modulates pain relief, reward, and addictive behaviors).




- **Methadone** is a full mu agonist and binds to the receptors without a ceiling effect or diminishing returns
- **Buprenorphine** is a partial agonist, meaning that it tightly binds but only partially activates the receptor, and producing a ceiling effect in experienced opioid users, at which point increasing the dose does not increase the effects on respiratory or cardiovascular function. For those with tolerance to opioids as a result of OUD, buprenorphine is often a safe choice. Overdose with buprenorphine in adults is less common, and most likely occurs in individuals without tolerance, or who are using co- occurring substances like alcohol or benzodiazepines.
- **Naltrexone** is a pure antagonist and binds to the mu receptor without activating it, thus blocking the receptor and the effects of other opioids. People may take MAT for months, years, or even a lifetime.

  When provided at the proper dose, MAT has no adverse effects on a person's intellectual or mental capabilities, physical functioning, or employability.[7]

Given that methadone for the treatment of OUD can only be provided by qualified providers in certified and accredited Opioid Treatment Programs[8] and that naltrexone requires full detoxification (7-10 days without any opioid use) before treatment initiation, buprenorphine in many cases is the most feasible medication to administer in ED settings.

# The Evidence for Emergency Department-Initiated Medication-Assisted Treatment Disorder

MAT, specifically opioid agonists such as methadone and buprenorphine, are highly effective treatments for OUD, decreasing illicit opioid use, craving, and transmission of infectious disease, as well as increasing retention in treatment.[9-19] While naltrexone, an opioid antagonist, has shown some promise in treating OUD,[20] full detoxification is a prerequisite, thus precluding the use of naltrexone in ED settings.

Buprenorphine and methadone have been shown to decrease mortality.[6] A recent study reported that buprenorphine was associated with a lower risk of overdose during active treatment compared to post- discontinuation.[21] Studies show that ED-initiated buprenorphine with facilitated transitions to outpatient care leads to better health outcomes,[9, 10, 22, 23] and is cost-effective.[24]

Despite this evidence, however, adoption has been slow, with few EDs offering treatment.[14, 25-27] A 2019 survey of emergency physicians from one health system found that only one in five had completed the mandatory waiver training, a third had ordered buprenorphine for individuals with OUD in the past three months, and less than 30 percent felt prepared to initiate buprenorphine.[28] However, state and governmental initiatives are underway to encourage adoption, notably recent efforts by the American College of Emergency Physicians (ACEP) which include generation of the Emergency Medicine Quality (E-QUAL) Network Opioid Initiative and a suite of educational resources containing an ED-specific waiver training course developed in collaboration with the American Academy of Addiction Psychiatry Providers Clinical Support System (AAAP/PCSS) (see Chapter 5). Moreover, SAMHSA has also funded PCSS-Universities, which ensures students in the medical, physician assistant, and nurse practitioner fields fulfill the training requirements needed to obtain a DATA waiver to prescribe FDA-approved MAT in office-based settings.

# Buprenorphine Formulations for the Treatment of Opioid Use Disorder

Buprenorphine is available in several formulations. The sublingual formulation, which is available as both a tablet and a buccal film strip, is most commonly used in EDs. There are also two different versions of the sublingual formulation; one with buprenorphine alone and one with buprenorphine in combination with naloxone. The buprenorphine/naloxone combination product is designed to discourage diversion, as naloxone has minimal oral bioavailability (i.e., absorption of a drug that reaches the digestive system) but can cause withdrawal symptoms if injected. This formulation is the preferred medication when buprenorphine treatment is to be undertaken. The buprenorphine- only version is often used with pregnant women to decrease potential fetal exposure to naloxone.

## SUBLINGUAL VS BUCCAL

**Sublingual** administration occurs when the drug is placed under the tongue where it dissolves and is absorbed into the blood through the tissues.

**Buccal** administration involves placing a drug between the gums and the cheek.

# Medication-Assisted Treatment in the Emergency Department

| Medication | Route of Administration/Form | Available Strengths |
|---|---|---|
| **Buprenorphine/Naloxone**<br>*(Tablets may be less expensive than film depending on insurance provider)* | | * = *equivalent dosing* |
| Generic Combination Product<br>• Buprenorphine hydrochloride<br>• Naloxone hydrochloride | Sublingual tablet or film | 2 mg/0.5 mg<br>8 mg/2 mg* |
| **Suboxone**<br>• Buprenorphine hydrochloride<br>• Naloxone hydrochloride | Sublingual film | 2 mg/0.5 mg<br>4 mg/1 mg<br>8 mg/2 mg*<br>12 mg/3 mg |
| **Bunavail**<br>• Buprenorphine hydrochloride<br>• Naloxone hydrochloride | Buccal film | 2.1 mg/0.3 mg<br>4.2 mg/0.7 mg*<br>6.3 mg/1 mg* |
| **Zubsolv**<br>• Buprenorphine hydrochloride<br>• Naloxone hydrochloride | Sublingual tablet | 0.7 mg/0.18 mg<br>1.4 mg/0.36 mg<br>2.9 mg/0.71 mg<br>5.7 mg/1.4 mg*<br>8.6 mg/2.1 mg<br>11.4 mg/2.9 mg |
| **Buprenorphine Alone**<br>(May used with pregnant women to decrease potential fetal exposure to naloxone) | | |
| **Generic Mono Product**<br>• Buprenorphine hydrochloride | Sublingual tablet | 2 mg<br>8 mg |
| **Sublocade**<br>• Buprenorphine hydrochloride | 30-day extended-release injection | 100 mg/0.5 mL<br>300 mg/1.5 mL |

Coe, M. A., Lofwall, M. R., & Walsh, S. L. (2019). Buprenorphine pharmacology review: Update on transmucosal and long-acting formulations. Journal of Addiction Medicine, 13(2), 93-103. https://doi.org/10.1097/adm.0000000000000457

# Frequently-Asked Questions: Emergency Department-Initiated Buprenorphine

## Who can administer and prescribe buprenorphine?

Buprenorphine can be administered by any licensed medical provider in a Drug Enforcement Administration-licensed facility, such as an ED or hospital, for treating OUD while arranging referral for formal substance use disorder treatment to a community provider or treatment program. A dose can be administered daily for up to three consecutive days but cannot be extended beyond 72 hours. Writing a prescription for buprenorphine to treat opioid use disorder requires obtaining a DATA 2000 waiver. This federally mandated waiver requires physicians to have eight hours of training, completed online, in person, or a blended course with four hours of face-to-face training and four hours of online training. Physician Assistants, Nurse Practitioners, Certified Nurse Anesthetists, Certified Nurse Midwives, and Advanced Practice Registered Nurses (APRNs) are required to complete 24 hours of training, eight hours of which can be completed via a blended course. See SAMHSA's website for eligible APRNs at https://www.samhsa.gov/medication-assisted-treatment.

## What do emergency providers need to know to start buprenorphine?

Individuals need to be assessed for the diagnosis of moderate to severe OUD. If the diagnosis is unclear from the history and physical exam, the individual's level of severity can be assessed by using a questionnaire specific to the DSM-5 criteria. Individuals who are experimenting may present after opioid overdose, or after only a few weeks of intermittent use, and may not meet criteria to start MAT. Once the assessment is made for OUD, then the degree of withdrawal must be assessed before treatment with buprenorphine is initiated in the ED. The Clinical Opiate Withdrawal Scale (COWS) score is used to assess when to initiate treatment (see Chapter 5).

## What is the Treatment Algorithm?

The dose of buprenorphine depends on the severity of the withdrawal symptoms and the history of last opioid use and type.

- Long acting opioids, such as methadone, require at least 48-72 hours since last use before initiating buprenorphine.
- Short acting opioids (for example, heroin or fentanyl) require approximately 12 hours since last use for sufficient withdrawal to occur in order to safely initiate treatment.(Clinical presentation should guide this decision as individual presentations will vary)

The risk with initiating buprenorphine too soon is that buprenorphine has a very high affinity for the mu receptor and will displace any other opioid on the receptor, thereby causing precipitated opioid withdrawal.

The following Federal Drug Administration guidelines should be used for buprenorphine induction:

- On day 1, an induction dosage of up to 8 mg/2 mg buprenorphine/naloxone sublingual film is recommended. Clinicians should start with an initial dose of 2 mg/0.5 mg or 4 mg/1 mg buprenorphine/naloxone and may titrate upwards in 2 or 4 mg increments of buprenorphine, at approximately 2-hour intervals, under supervision, to 8 mg/2 mg buprenorphine/naloxone based on the control of acute withdrawal symptoms. For example, if the COWS score is greater than 8, administer 2-4mg, observe the individual for 1-2 hours and then administer second dose if indicated.
- On day 2, the individual should be assessed for response to the first day's dose. Those with moderate to severe OUD usually report relief soon after having received buprenorphine and a return of withdrawal symptoms some hours after the buprenorphine/naloxone was administered. Based on the person's description of symptoms, a decision is made as to buprenorphine/naloxone dose to be administered which may be as much as 16/4 mg. Most people treated with buprenorphine/naloxone can be stabilized on a single daily dose of 12/3-16/4 mg.

# Tips for Successful Adoption of Emergency Department-Initiated Buprenorphine

Initiating buprenorphine in the ED improves outcomes for individuals with OUD. Implementing MAT in the ED will be easier and more effective if several key challenges are identified and addressed early on. These challenges can often be overcome by including and gaining buy-in from stakeholders in the ED and community providers and by debunking common myths.[29]

- **Anticipate the need for more waivered providers.** ED providers have not traditionally completed the training requirements that are needed to obtain the DATA 2000 waiver required to write prescriptions for buprenorphine. However, online courses are available that can be completed in modular form over time, often at no cost to the providers. In 2019, an ED-specific waiver training curriculum was collaboratively developed by ACEP and AAAP/PCSS.
- **Identify key ED and community stakeholders.** Partnerships are key to facilitate referrals and coordinate ongoing care. ED champions in each discipline (physician, resident, nursing, advanced practice providers, social work, etc.) should be identified. Care managers, counselors, or other community-based supports can help facilitate referrals and foster engagement in treatment beyond initiation in the ED.[30]
- **Establish agreements with community providers and treatment programs.** Community providers and treatment programs may be available, but ED providers may not be aware of or familiar with these programs and their resources. It is essential to understand what SUD services are available locally and to develop pathways with those programs to ensure seamless transition from the ED to referral sites.
- **Address misconceptions about MAT.** There is a common misconception that MAT is just "replacing one addictive drug for another."[31,32] It is essential to reinforce that buprenorphine is a medication prescribed by a health provider, in a certain dose, and taken according to a specific schedule.

- **Reduce the stigma associated with OUD.** Some providers hold negative attitudes with respect to individuals with OUD, and many use stigmatizing language and terminology, often unconsciously.[34,35] Emphasize that OUD is a treatable disease and that words matter. Providers should use person-centered language, identifying an individual as a person who has an addiction or OUD, not as an "addict."
- **Decrease logistical barriers to obtaining buprenorphine.** Individuals may face many challenges when trying to obtain their prescriptions. EDs can work with local pharmacies to stock buprenorphine, assist with filling prescriptions if written by hospital physicians, and obtaining pre-authorization, if required. ED staff should work with community referral sites and find out about options for transportation and financial assistance for medications.
- Collect data that encourages organizational change. Work with hospital leaders to garner support for initiating treatment and referrals. Provide data demonstrating the proportion of individuals who follow up with referrals after ED- initiated buprenorphine, and the rate of return ED visits. Feedback to providers regarding individuals that do enter treatment is also essential. Too often, emergency providers see only the return cases.

## Conclusion

The ED offers an opportunity to improve access to care for individuals with OUD. Offering buprenorphine has the potential to change the trajectory of the opioid epidemic and is proven to reduce morbidity and mortality and save lives.[9, 10, 22, 23, 33]

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CHAPTER

# 2

WHAT RESEARCH TELLS US:

# Evidence Supporting the Use of Medication-Assisted Treatment in Emergency Departments

Improved outcomes for individuals with emergency department-initiated buprenorphine have been demonstrated recently. The concept, however, is grounded in a large body of research demonstrating improved outcomes for individuals receiving Medication Assisted Treatment (MAT)[1-5]

Use of MAT is widely supported by the National Institute on Drug Abuse (NIDA), the American Society for Addiction Medicine, the Centers for Disease Control and Prevention and the World Health Organization (WHO), and among many other federal and international organizations and agencies.[6-9] The WHO added buprenorphine and methadone to the list of Essential Medications in 2005.[6]

The National Academies of Sciences, Engineering, and Medicine consensus study report sponsored by NIDA and the Substance Abuse and Mental Health Services Administration, entitled *Medications for Opioid Use Disorder Save Lives* found that:[10]

- Medications approved by the U.S. Food and Drug Administration (FDA) to treat opioid use disorder (OUD) are effective and save lives
- Long-term retention on MAT is associated with improved outcomes
- A lack of availability of behavioral interventions is not justification to withhold MAT

- Most people who could benefit from MAT do not receive it, and access is inequitable
- Confronting the major barriers to use of MAT is critical to addressing the opioid crisis

This chapter explores data supporting the use of MAT, and specifically buprenorphine. Buprenorphine is the most common MAT initiated in ED-settings. This is because methadone for the treatment of OUD can only be provided by qualified providers in certified Opioid Treatment Programs and naltrexone requires full detoxification 7-10 days before treatment initiation. Buprenorphine allows EDs to provide OUD treatment to the individuals they serve.

# The Benefits for Addressing Opioid Use Disorder

Evidence for the use of MAT is robust, with a broad range of improved outcomes reported for individuals with moderate or severe OUD. Outcomes include:

- Increased treatment retention and benefits associated with being in treatment[4, 11, 12]
- Reduced or eliminated illicit opioid use[4, 12]
- Reduced mortality[13, 14]
- Reduced opioid overdose[14]
- Reduced high-risk behaviors and their consequences,[15-17] including HIV and hepatitis C transmission[18-22]
- Improved pregnancy-related outcomes for infant and maternal health[23, 24]
- Improved health and wellness[5, 23-28]
- Decreased utilization of ED and hospital care.[29]

Psychosocial treatments offered in addition to treatment with methadone or buprenorphine are effective in further increasing treatment attendance and completion and reducing opioid use during treatment and at follow up.

While more research is needed, the referral of individuals with OUD to not only MAT providers, but also mental health and other medical treatment and social service providers, could enhance the benefits of MAT.[30]

# Improving Equitable Access to Opioid Use Disorder Treatment

A large treatment gap exists for OUD [31] This treatment gap has been driven by limited access to MAT and has generated waiting lists in some parts of the country.

Fortunately, over the past several years, there have been significant improvements in treatment capacity for MAT, as well as a recognition that a key factor in addressing the opioid epidemic is increasing access to evidence-based treatment.[32, 33]

The provision of methadone with emergency counseling has been demonstrated by multiple studies to show improved linkage to comprehensive treatment, decreased heroin use, decreased illegal activity, and improved treatment retention compared to individuals with OUD who were only on treatment waiting lists.[34, 35]

Recently, this work has been replicated with buprenorphine, with lower rates of illicit opioid and injection drug use in individuals receiving medications from automated dispensers, which promote medication adherence, as compared to those on waiting lists.[36]

## Mortality Rates of Non-Fatal Opioid Overdose

A recent analysis of 17,568 ED visits for non-fatal opioid overdose found the following outcomes in the 12 months post ED visit:

**2.1**
**deaths per 100 person-years**
opioid-associated mortality

**4.7**
**deaths per 100 person-years**
all-cause mortality

Only 30 percent received any MAT in the year following the overdose. Those individuals who had received buprenorphine or methadone had a significant reduction in both cause and opioid-associated mortality.[13] Importantly, no benefit was observed in those individuals that received naltrexone.[13]

Another analysis of 17,241 ED visits for non-fatal opioid overdose found a one-year all-cause mortality of 5.5 percent and a 1-month mortality of 1.1 percent.[37] Initiating MAT in the ED offers increased access to evidence-based treatment and has been shown to improve outcomes for individuals with OUD.

# Emergency Department-Initiated Buprenorphine is a Recommended Best Practice

The first randomized control trial comparing buprenorphine for the initiation of OUD treatment with other models of psychosocial intervention and referral was published in 2015.[1] A total of 329 individuals between 2009-2013 meeting criteria for opioid dependence were randomized to one of three treatment arms:

(1) Referral only, based on individual insurance and preference;

(2) Brief Intervention (a brief psychosocial intervention, namely the Brief Negotiation Interview) with facilitated referral or;

(3) Brief Intervention and ED-initiated buprenorphine with referral to primary care for 10 weeks of continued medical management.

## Results of a Randomized Control Trial on ED-initiated Buprenorphine for OUD Treatment

| Dose | ED-initiated Buprenorphine | Brief Intervention with Facilitated Referral | Referral Only |
|---|---|---|---|
| **Engaged in treatment at 30 days** | 78% | 45% | 37% |
| **Self-reported past 7-day opioid use at 30 days** | 0.9 days | 2.4 days | 2.3 days |

Source: D'Onofrio, G., O'Connor, P.G., Pantalon, M.V., Chawarski, M.C., Busch, S.H., Owens, P.H., Bernstein, S.L., and Fiellin, D.A. (2015) Emergency department-initiated buprenorphine/naloxone treatment for opioid dependence: A randomized clinical trial. Journal of the American Medical Association, 313, 1636-1644.

Individuals in the ED-initiated buprenorphine group were significantly more likely to be engaged in formal OUD treatment at 30 days, compared to the referral group and the brief intervention with facilitated referral group.[1] Importantly, one-half of the buprenorphine group received unobserved home use. No complications were reported during the ED visit or the study period.[1]

## Why Buprenorphine Instead of Other Medications for Opioid Use Disorder in the Emergency Department?

**Buprenorphine** is safe to initiate in the ED by any ED provider and permitted to be prescribed with a DATA waiver.[38]

**Methadone** is a full MU agonist and binds to the receptors without a ceiling effect. Higher doses are often needed to achieve a steady state.[25]

**Naltrexone** administration, as a full opioid antagonist, is limited. The individual must undergo detoxification from all opioids for at least 7-10 days.[39]

The goal of initiating OUD treatment in the ED is to manage the individual's withdrawal symptoms, cravings and other medical complications of opioid use. Addressing an individual's needs until they see a community provider or are engaged with a treatment program gives individuals a sense of autonomy and control until their follow-up appointment.

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CHAPTER

# 3

# Examples of Emergency Department-Initiated Buprenorphine Programs

This chapter highlights four programs that use medication assisted treatment (MAT) to address the needs of individuals with opioid use disorders (OUD) in emergency departments (EDs).

Each of these programs has achieved outcomes consistent with research on the effectiveness of MAT.

Each program follows a basic model for the provision of buprenorphine in the ED. In each example, ED staff screen individuals for OUD. Prior to discharge, individuals receive a referral to a community provider for MAT treatment and other psychosocial services. If a follow-up appointment cannot be scheduled for the same or next day, some programs, like First Step Opiate Addiction Treatment Program and the Cooper ED Bridge Program, provide linkages to other support resources. Programs like the Center for Opioid Recovery and Engagement ED Buprenorphine Program and the Charleston Medication Assisted Treatment Program Pilot, provide prescriptions for buprenorphine for home induction. The Substance Abuse and Mental Health Services Association's Findtreatment.gov can serve as a referral resource for providers.

The programs in this chapter vary by setting, staffing, and level of collaboration with community providers. Each program increases accessibility to evidence-based treatment for OUD in their communities.

## Choosing Programs

In recent years, many program models have developed across the country. ED-initiated MAT programs, including those selected by the expert panel and highlighted in this chapter, are continuously evolving in response to a number of factors. Factors include community needs, populations served, development of the science, and resource availability. The programs in this chapter are not meant to be representative of all potential program models. Rather, they represent models that are effective in providing MAT.

It is important to note that the programs represented here were chosen, in part, because they operate in a variety of settings – rural, urban, community, and academic hospitals and health systems. Each setting presents different barriers and consequently requires different service delivery approaches.

## Format of the Chapter

Each program is summarized with descriptions of key program elements, setting, OUD identification, assessment, treatment procedures, and outcomes. The format of these summaries is uniform to enable the reader to find relevant information quickly.

# First Step Opiate Addiction Treatment Program

## Key Elements

- Embedded in a community that prioritizes addressing OUD
- Supported by local organizations and agencies

### Akron, OH

https://www.summahealth.org/medicalservices/behavioral

### Setting

Community Hospital serving rural and urban communities. The program is associated with an academic medical center.

### Opioid Use Disorder Identification

- Anyone coming to the ED is screened for OUD through medical screening history and exams, drug testing, and the Ohio Automatic Prescribing Reporting System review
- Individuals who are already receiving MAT are excluded

### Assessment Processes

- Individuals that are suspected of having an OUD meet with an Addiction Care Coordinator for formal OUD screening and determination of the Clinical Opioid Withdrawal Scale (COWS). If the COWS score is greater than eight, the individual is offered MAT.

### Treatment

- Buprenorphine (4mg/1mg) initiated in the ED, with repeated doses, as needed
- Arrangements made to help the individual connect with next day outpatient care in an opioid treatment program
- When unable to connect with next day appointments, the ED provides up to a total of three treatment visits using the 72-hour rule

## Collaboration with Community Providers

Many providers are available within the hospital system for follow-up and long-term care.

The Addiction Care Coordinator position is funded, in part, through local community support

## Staffing

The departments of psychiatry, emergency medicine, and primary care work collaboratively to address the needs of individuals with OUD. Social work staff are integrally involved with the MAT program.

Addiction Care Coordinators work within the ED from 1:00 pm to 1:30 am since this is when most overdoses cases occur.

## Program Success

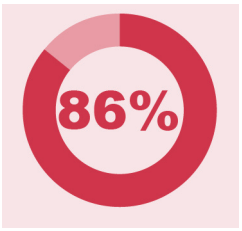
The program is successful in engaging individuals with OUD in treatment. Approximately 85 percent of individuals identified in the ED with OUD who accepted a referral, scheduled an appointment, or began taking medication attended their first follow- up appointment with a community MAT provider. The program is embedded in the community and actively collaborates with community service providers. The program includes trained recovery coaches that help individuals with OUD connect with community resources.

## By the Numbers*

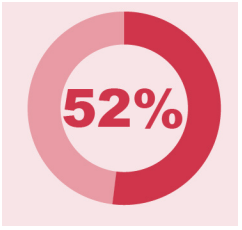
Annually, the ED serves
**33,222 individuals**

**212**
individuals **were screened for OUD** within the first 6 months of the program

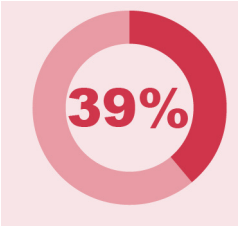
**97**
**were engaged** in the ED-initiated MAT program




attended the first **follow up outpatient MAT appointment**




of those who attended their first follow up appointment were **enrolled** in treatment **at 30 days**




were also **enrolled** in treatment **at 60 days**

*Data as of May 2019.

# Center for Opioid Recovery and Engagement (CORE) ED Buprenorphine Program

## Key Elements

- Engages and offers MAT treatment options to individuals seeking care for OUD in the ED
- Engages with individuals who come to the ED for OUD-related complications, such as infections and overdoses
- Certified Recovery Specialists with personal experience with substance use disorder included on the OUD Care Team to encourage individuals throughout their recovery journey
- Medical center staff speak at informational "Town Hall" meetings to describe OUD treatment options and to distribute naloxone

### Penn Presbyterian Medical Center (PPMC) Philadelphia, PA

https://www.pennmedicine.org/for-patients-and-visitors/find-a-program-or-service/behavioral-health/drug-and-alcohol-addiction-treatment/center-for-opioid-recovery-and-engagement

### Setting

Program set within an urban university hospital health system with academic and community affiliations. The hospital includes a major trauma center.

### Opioid Use Disorder Identification

Individuals self-identify as having OUD, or come to the ED for OUD complications such as cellulitis or fever.

### Assessment Processes

Individuals with OUD often self-identify or are identified by ED staff using a triage algorithm. Certified recovery specialists work closely with individuals with OUD and discuss treatment options. Individuals interested in buprenorphine treatment are administered the COWS by the nurse or provider. A substance use history including successful and unsuccessful past treatment is assessed.

### Treatment

- Emergency medicine clinicians, faculty, residents, or advanced practice providers offer treatment options—most often buprenorphine—before or after the certified recovery specialist engages with the individual.
- State's Prescription Drug Monitoring Program is queried to assess for prior prescription opioid use, including prior buprenorphine prescriptions. For individuals with COWS scores less than eight, a dose of 2mg, 4mg, or 8mg of buprenorphine is administered

- Individuals with ongoing symptoms after 30-60 minutes receive subsequent doses following a buprenorphine treatment algorithm
- For individuals without modest withdrawal symptoms (COWS score equal to or greater than eight), a bridging prescription and home induction of buprenorphine are offered

## Collaboration with Community Providers

Individuals are referred to opioid treatment programs based on their home or work locations, transportation, and insurance considerations.

Referrals are made to multidisciplinary providers in the University of Pennsylvania Health System who continue buprenorphine in their office-based practice, including family medicine, internal medicine, and psychiatry. The medical center has memorandums of understanding and letters of support from local non-profit, government, and non-governmental organizations, including the Philadelphia Department of Public Health, Corizon Health at the Philadelphia Department of Prisons, Phoenix Recovery Houses Consortium, and the Health Federation of Philadelphia.

## Staffing

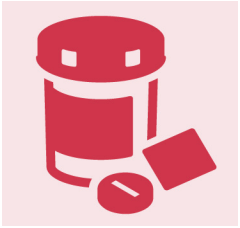
Certified Recovery Specialists complete a 54-hour training program and fulfill all state Certification Board requirements. The program has an abundance of waivered providers able to provide buprenorphine prescriptions for home induction. OUD Care Team members provide enhanced case managing services that assist in a full array of psychosocial wraparound services and supports for up to 12 months.

## Program Success

Individuals with OUD with multiple ED visits accounted for almost 60 percent of all ED visits at the facility. By connecting these individuals with a Certified Recovery Specialists and using MAT, more individuals are receiving treatment in the community. This has led to a reduction in ED visits and admissions, as well as overall decreased ED utilization.

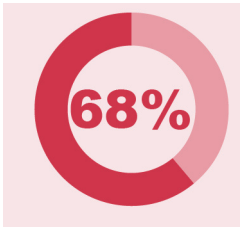
## By the Numbers*

Data are for individuals enrolled in Medicaid and Medicare with documented OUD visiting the Penn Presbyterian Medical Center ED, Hospital of the University of Pennsylvania ED, the Pennsylvania Hospital ED, and Philadelphia Crisis Response Centers.



Since implementation of the MAT program, there was an increase from **20% to 68%** of individuals with OUD receiving ED-initiated buprenorphine (N=105)

Individuals **consulted by a Certified Recovery Specialist were 13% less likely to return** to the ED within 30 days (N=49)




**68%** of individuals who received an ED-consultation and buprenorphine were **in treatment**, compared to less than 5% before the program started

*Data as of May 2019.

# South Carolina Medication-Assisted Treatment (MAT) Program Pilot

## Key Elements

- Strong support from hospital administration to implement MAT in the ED
- Universal substance use screening for all ED visits
- Peer recovery coaches engage individuals with OUD
- ED electronic health record platforms integrated with evidence-based screening tools, peer recovery coach documentation, and MAT prescription records

## Charleston, SC

https://muschealth.org/patients-visitors/news/2018/08/01/musc-pilot-program-shows-success-in-treating-opioid-users

### Setting

Three operationalized EDs throughout the state. The EDs include a private for-profit hospital, a large state academic institution, and a small community medical center.

### Opioid Use Disorder Identification

- Hybrid model that differs among the EDs.
- Individuals are either universally screened for OUD by triage nursing staff or ED staff use a combination of screening by triage nursing staff, review of electronic health records, and/or screening by peer recovery coach staff

### Assessment Processes

ED staff and peer recovery coaches use Screening, Brief Intervention, and Referral to Treatment (SBIRT) to engage with individuals with OUD. Peer recovery coach staff assess an individual's readiness for change, employing motivational interviewing techniques. The medical team ensures medical stability, OUD diagnosis, and level of withdrawal.

### Treatment

- Individuals with OUD who are in withdrawal are administered one dose of 8mg sublingual buprenorphine or 8-2mg sublingual buprenorphine-naloxone during their ED visit
- Individuals with OUD do not receive a prescription for ongoing buprenorphine and before discharge are scheduled for a same or next day appointment with a community treatment provider who can continue medication and enroll the individual in counseling services as appropriate

## Collaboration with Community Providers

Peer recovery coaches who are familiar with community service providers facilitate referral to community treatment. Peer recovery coaches provide individuals with a standing appointment time and facilitate transmission of electronic health records to the community treatment provider. Community treatment providers commonly include traditional opioid treatment programs, publicly-funded treatment programs, and/or office-based opioid treatment in psychiatric practices, federally qualified health centers, and primary care settings.

## Staffing

The ED care team includes nurses, physicians, advanced practice providers, pharmacists, social work/ case management, and peer recovery coach staff. Peer recovery coach staff have a minimum of three to five years in recovery from substance use. In academic settings, medical residents and fellows are also included in the care of individuals with OUD.

## Program Success

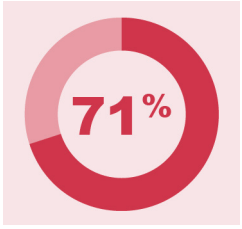
Naloxone kits and education are provided to all individuals with OUD prior to ED discharge, regardless of readiness to engage in treatment. Institutional "culture change" occurred once ED staff were provided the education and tools for addressing OUD. Staff were also able to see patients successfully linked to treatment where previously they were accustomed to seeing repeated visits for withdrawal and overdose with little success in attempts to engage in ongoing follow-up. There is currently a waiting list of ED sites throughout the state seeking grant funding and technical assistance to implement best practices for the treatment of OUD in the ED.

## By the Numbers*

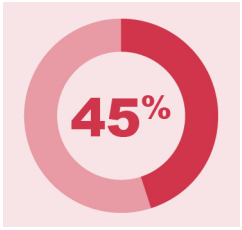
The following data are across three diverse EDs.

**6,557** **individuals screened** for OUD

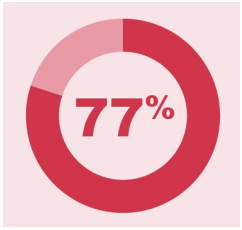
**719** **individuals identified** to misuse or abuse opioids



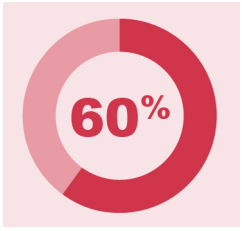

**71%** of individuals identified were eligible for buprenorphine




**45%** of individuals eligible for buprenorphine (N = 212) consent to treatment




Approximately **77%** of individuals who received buprenorphine in the ED engage in next day community outpatient treatment




Nearly **60%** of individuals that attend their first outpatient treatment appointment remained in treatment at 30 days

*Data as of May 2019.

# Cooper Emergency Department Bridge Program

## Key Elements

- Multidisciplinary team addresses the needs of individuals with OUD
- ED providers required to have a waiver to prescribe buprenorphine
- Follow up appointments with community MAT providers scheduled to occur within seven days of the ED visit
- Emergency Medical Services outreach to individuals administered naloxone in the community

### Camden, NJ

https://www.cooperhealth.org/services/addiction-medicine

### Setting

Inner city ED within a university hospital setting with 635 beds.

### Opioid Use Disorder Identification

Individuals identified in several ways including self-disclosure or referral from other local hospitals or the Emergency Medical Services outreach team

Individuals are candidates for the MAT protocols if they present at the ED after opioid overdose or naloxone reversal, or with injection drug use-related medical complications such as infection

Universal OUD screening provided for pregnant women in the ED

### Assessment Processes

Individuals are assessed by an ED provider and diagnosed with OUD using DSM-5 criteria (see Appendix 2).

A Prescription Drug Monitoring Data program is reviewed by ED staff for concurrent prescriptions.

### Treatment

- Individuals experiencing withdrawal are offered ED buprenorphine induction
- Bridge prescriptions for buprenorphine naloxone offered to patients with a verified intake scheduled at an opioid treatment program
- Pregnant women with OUD offered inpatient stabilization, if needed
- Medication formulations are prescribed based on preferred formulation for insured individuals
- Harm reduction strategies include syringe exchange program, HIV and Hepatitis C testing, and Hepatitis A vaccinations
- Emergency naloxone kits provided or prescribed

## Collaboration with Community Providers

Recovery Specialists, supported by a county-based behavioral health program, are available within the ED to help connect individuals with follow-up care. The Cooper ED collaborates with a local federally qualified health care center (Project Home) and an outpatient treatment provider (Delaware Valley Medical), to provide intermediate care between an ED visit and enrollment in an opioid treatment program. The ED works closely with a local shelter system to address the needs of individuals with MAT who are experiencing homelessness. A private, in-hospital pharmacy is available to fill prescriptions promptly and to communicate with addiction medicine and ED staff.

An Addiction Breakfast Club convenes regularly and helps improve care and collaboration among providers and support staff from the ED, behavioral health clinics, federally qualified health centers, outpatient treatment programs, syringe exchange programs, Emergency Medical Services outreach, the Camden County Addiction Awareness Task Force, and the County Alcohol and Drug Abuse Director.

## Staffing

Multidisciplinary team includes a nurse, health coach, therapist, care coordinator, peer recovery specialist, and physicians. Recovery Specialists work with individuals with OUD and are available 24 hours a day, 7 days a week within the ED. All ED providers are required to have a waiver to prescribe buprenorphine.

## Program Success

Due to the achievements and growth of the Cooper Addiction Medicine program, there have been two Centers of Excellence established. The goal of the Centers at the Cooper Medical School of Rowan University is to educate medical staff, establish an Addiction Medicine Fellowship, provide wavier training to providers in nine southern counties, mentor providers and staff, and support an initiative to provide stigma-free, accessible addiction care to individuals with OUD.

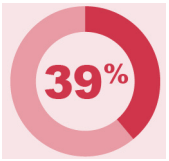
## By the Numbers*

An average of **12** calls per day to the Emergency Medical Service outreach team for overdose

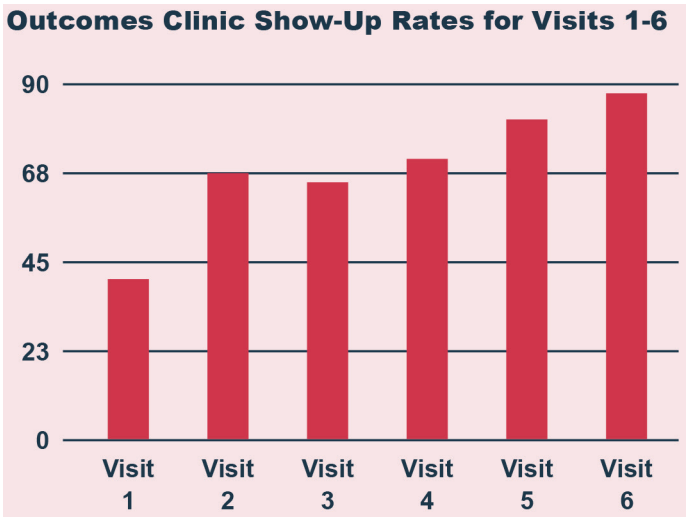
Up to **30** overdoses in one day during the past year

An average of **15** opioid-related ED visits per day

**294** individuals have been connected with opioid treatment program appointments since official program launch




**39%** of individuals given a bridge prescription attend their follow-up appointment at the Cooper outreach clinic. Factoring in individuals missing their initial/ secondary bridge appointments who later walk into the clinic to access treatment, the show-up rate increases to **88%**.




*Data as of May 2019.

CHAPTER

4

# Addressing Myths to Implementing Evidence-Based Practices and Programs

Robust evidence supporting the use of Medication Assisted Treatment (MAT).[1-7] Yet, integrating these treatments into emergency department (ED) practices is limited. This is partly because of regulatory barriers regarding the administration of methadone and the pharmacological barriers prohibiting the use of naltrexone to treat opioid use disorder (OUD) in the ED.[8]

ED-initiated buprenorphine is demonstrated to be effective in the treatment of OUD in the ED.[1,7]

There are no regulatory or pharmacological barriers prohibiting use. The widespread implementation of ED-initiated buprenorphine has been hindered largely by myths and misperceptions held by clients, providers, and the system at large.[8-10]

Key to overcoming such concerns is an evidence-based approach that relies on existing knowledge about OUD and its treatment with medications. Not only does accurate information serve to erode stigma and counter discrimination, it facilitates the delivery of high quality, evidence-based care that saves lives.[8]

In this chapter we focus on common myths identified by the literature and the expert panel regarding the implementation of MAT within EDs. For each myth and misperception, facts and potential solutions are provided to be used alongside scientific data to address each concern.

**Myth:**

People can just stop using opioids whenever they want

**Fact:**

- OUD is often a recurring and continuous medical condition with long-lasting neurochemical changes that affects behavior and decision making.
- Improved outcomes, including morbidity and mortality, have been found with the use of methadone and buprenorphine compared to abstinence-based treatment models.

**Solution:**

- Encourage all healthcare professionals to view OUD as a chronic disease and to communicate to the individuals they serve that treatment is effective.

Stigma grows, in part, from misconceptions about OUD. Some providers and many in the public view OUD as a moral failing. Some feel that individuals with OUD can just choose to stop using drugs whenever they want.[8, 11]

Data consistently show that people with OUD who take agonist medications are:

- less likely to use opioids and other drugs;[4, 12]
- less likely to transmit infectious diseases;[13-16]
- less likely to have fatal and non-fatal overdoses;[3, 16, 17]
- have lower all-cause mortality;[6] and
- acquire improved social functioning.[5,18]

Scientific facts and data are the keys to addressing stigma. Substance use disorders are chronic diseases. Evidence for MAT is robust. People may return to use sometimes, even when treatment has worked in the past. Encourage all healthcare professionals, including physicians, advanced practice providers, nurses, hospital administrators and social workers to view OUD as a chronic disease for which effective treatments are available.

**Myth:**

People with OUD don't want treatment

**Fact:**

- As with many other diseases and conditions, some people may not want treatment, but many will. They will be more likely to accept help if they feel that they are in a safe, supportive environment to discuss treatment options.

**Solution:**

- Share success stories of people that have received MAT, particularly if treatment was initiated in the ED. Focus on treatment engagement, improved quality of life, and employment.
- Emphasize that the primary goal of initiating buprenorphine treatment in the ED is to reduce the morbidity and mortality associated with OUD and to enhance successful linkage to ongoing substance use treatment.

People with OUD may have had prior negative or stigmatizing experiences in the ED and other healthcare settings. These experiences may hinder their willingness to ask for help in the ED.[19, 20]

A compassionate, person-centered approach is key to establishing rapport and enhancing motivation to engage in treatment. Conversations using concepts from motivational interviewing can be delivered by physicians, nurses, social workers, or peer navigators.[18, 21]

Some individuals may still not want treatment, especially after an overdose, but this does not mean they will not change their minds in the future and highlights the need for harm reduction strategies and easily available treatment when they are ready.

Emergency department practitioners should view OUD as they do other chronic conditions.

Individuals may come to the ED when they feel that they are in crisis and need help addressing their OUD. Individuals that come to the ED seeking treatment often do not know how to access treatment. Some people have clarifying life events that prompt immediate readiness to start treatment. The ED should function to promote rapid assessment, treatment, and referral to care intended to manage the condition.

**Myth:**

If the ED provides MAT, it will be seen as the de facto treatment facility

**Fact:**

- Individuals with OUD are already seeking care in the ED.

**Solution:**

- Initiate treatment protocols during triage to promote rapid assessment, treatment and referral.
- Consider integrating support staff such as care managers and peer specialists.

Concern frequently exists among ED clinicians, nurses, and administrators that once MAT is incorporated into the ED, people will repeatedly come for their medications to the ED. Related is the fear that the ED will gain a reputation as being the primary treatment option for OUDs in the community, leading to overcrowding, overextended staff, and ED physicians being unable to address other types of emergencies.

Data does not support these concerns. Although many individuals with OUD already use EDs, repeated visits to the ED have not been demonstrated at sites that offer buprenorphine.[22]

EDs and hospitals are increasingly training case managers, nurses, and peer specialists to address the needs of individuals with OUD. Trained staff should be integrated into the ED and have oversight so that fidelity to their evidence-based interventions is ensured. ED providers and staff can work to identify local treatment sites and develop referral pathways that often exist in many communities, but are unknown to ED staff.

**Myth:**

Starting buprenorphine in the ED is too complicated

**Fact:**

- Waiver training is easily accessible and can mostly be completed online Resources and guidance are available online.

**Solution:**

- There are steps that can make implementation less complicated, such as establishing protocols specific to ED and integrating MAT into your electronic workflow.
- Faculty development days or group learning events can be implemented to complete waiver training.

Several EDs have made their protocols and resources available online for local adaptation and use. See Chapter 5 for example protocols, tools, and program implementation resources.

The training required to obtain the waiver to prescribe buprenorphine can be done completely online for physicians as well as Advanced Practice Providers (Physician Assistants or Nurse Practitioners). Many trainings are free of charge. In many states, waiver training can count toward continuing medical education credits, requirements for specialty certification, recertification, and licensing.

Buprenorphine is safer and more predictable than many medications used as part of routine ED practice. Treatment can begin in less time than the average urgent care visit. It may be helpful to connect physicians to substance use treatment consultation or a community hotline operated by experts. The American Academy of Addiction Psychiatry (AAAP), American Society of Addiction Medicine (ASAM), and Providers Clinical Support System have resources that can help physicians with complex cases. It is also helpful to identify champions to support new prescribers. Additional support can be provided by social workers or other members of a multidisciplinary care team.

**Myth:**

In my community there are no options for providing ongoing buprenorphine treatment

**Fact:**

- Most communities have resources that may be unknown to ED staff.

**Solution:**

- EDs should seek to identify point of contact with community service health promotion advocates, navigators, peer specialists, case managers, and social workers can help facilitate a transition into community treatment.

The community's service providers and resources need to be investigated by ED staff. There is great value in developing and maintaining relationships with local health departments and a full range of community service providers to create a network that is ready and able to receive and treat individuals who have buprenorphine initiated in an ED. The ED staff need to know what services each provider or treatment center provides, and other requirements such as insurance types, mandatory counseling session, etc., so that both the individual and the receiving provider are on the same page. Establish good rapport between the ED and community services and a feedback system to ensure seamless transitions. The SAMHSA, ASAM, and Addiction Policy Forum websites offer treatment locators (see Chapter 5).

Often individuals with OUD have multiple co-occurring conditions, and a cadre of service provider options may be necessary to address all of an individual's conditions.

Consider models that include assistance to help transition the individual into community services. A liaison or point of contact can be effective in ensuring smooth continuation of treatment and feedback for ED staff.

# Conclusion

An ED visit represents a critical, time-sensitive point at which initiating lifesaving treatment for individuals with OUD is possible. Data supporting the effectiveness of agonist medications for reducing opioid associated morbidity and mortality are strong. Common misperceptions and myths, while pervasive, can be overcome with scientific data, education, stakeholder engagement, and dissemination of best practices.

Emergency practitioners can integrate ED-initiated buprenorphine with direct linkages to outpatient services into routine clinical practice, potentially changing the trajectory of the opioid epidemic.

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CHAPTER

5

# Resources to Support Greater Access to and Effective Use of Medication-Assisted Treatment Disorder in Emergency Departments

Developing a program to integrate medications assisted treatment (MAT) into hospital emergency departments (EDs) requires education, engagement of champions representing all provider groups, buy- in from hospital and ED leadership, an infrastructure to facilitate screening, assessment, and adherence to treatment protocols, as well as collaborations with community providers to ensure warm handoffs for transitions of care. ED staff also need to obtain waivers allowing them to prescribe medications, and gain familiarity with policies, protocols, and educational materials. Continuous quality improvement and bidirectional feedback from the ED to community providers and programs ultimately improves the care of individuals with opioid use disorder.

This chapter presents resources that are available to support greater access to and effective use of MAT in EDs.

## Tools for Screening and Assessment

Knowledge and access to screening, diagnostic, and opioid withdrawal tools are essential for addressing the needs of individuals with OUD in ED settings.

It is critical to identify individuals with moderate to severe OUD by reviewing the Diagnostic and Statistical Manual of Mental Disorders (DSM–5) criteria.

Assessing the degree of withdrawal that individuals experience using the Clinical Opiate Withdrawal Scale (COWS) enables providers to follow treatment algorithms to either initiate buprenorphine in the ED or prescribe for unobserved home use.

- **COWS:** This tool can help ED staff rate common signs and symptoms of opiate withdrawal and monitor these symptoms over time. The scale can also be used to help clinicians determine the stage or severity of opiate withdrawal and assess the level of physical dependence on opioids. https://www.drugabuse.gov/sites/default/files/files/ClinicalOpiateWithdrawalScale.pdf
- **Drug Abuse Screening Test (DAST-10):** The DAST-10 is designed to be a brief self-report instrument for use with adults and older youth and provides a quick index of drug abuse problems. https://cde.drugabuse.gov/instruments
- **National Institute on Drug Abuse (NIDA) Quick Screen:** The NIDA Quick Screen is appropriate for screening individuals who are age 18 or older for OUD. https://www.drugabuse.gov/publications/resource-guide-screening-drug-use-in-general-medical-settings/nida-quick-screen

- **The National Council Center of Excellence for Integrated Health Solutions Screening Tools:** This federal website includes screening instruments for drugs and alcohol abuse, among others. https://www.thenationalcouncil.org/integrated-health-coe/resources
- **Subjective Opiate Withdrawal Scale (SOWS):** This scale contains 16 symptoms and signs associated with opiate withdrawal. The scale relies on the individual's reported experience of withdrawal. https://www.asam.org/docs/default-source/education-docs/sows_8-28-2017.pdf?sfvrsn=f30540c2_2

## Diagnostic Tools

- **Addiction Severity Index (ASI):** This semi-structured interview is used to assess substance abuse and related problems. The instrument covers seven potential problem areas: medical, employment/support status, alcohol, drug, legal, family/social, and psychiatric. https://adai.uw.edu/instruments/pdf/addiction_severity_index_baseline_followup_4.pdf
- **DSM-5 Criteria for OUD Diagnoses:** This tool can be used to identify individuals who meet criteria for moderate to severe OUD and are good candidates for ED-initiated MAT. https://www.asam.org/docs/default-source/education-docs/dsm-5-dx-oud-8-28-2017.pdf?sfvrsn=70540c2_2
- **The Tobacco, Alcohol, Prescription Medication, and Other Substance Use (TAPS) Tool:** This tool combines screening and brief assessment for commonly used substances, eliminating the need for multiple screening and lengthy assessment tools. It provides a two stage brief assessment adapted from the NIDA quick screen and brief assessment (adapted ASSIST-lite). https://www.drugabuse.gov/taps/#/

## Implementation Tools for Delivering Medication-Assisted Treatment in Emergency Departments

There are a variety of implementation tools available to help incorporate MAT into EDs. Sample protocols, toolkits and other resources are available that can help programs incorporate best practices.

- **American Hospital Association Resource Center:** This resource center provides links to several toolkits, protocols, online tools, and information for the treatment of OUD. https://www.aha.org/bibliographylink-page/2018-09-28-treatment-options-opioid-use-disorders
- **ED-BRIDGE Resources:** This comprehensive site from the California Bridge Program provides up-to-date ED and inpatient resources to support access to treatment for substance use disorders. http://www.BridgeToTreatment.org
- **Emergency Department Medication- Assisted Treatment of Opioid Addiction Protocol:** This protocol from the California Health Care Foundation was created to help guide the provision of MAT for OUD in emergency settings. https://www.chcf.org/wp-content/uploads/2017/12/PDF-EDMATOpioidProtocols.pdf
- **E-QUAL Network Opioid Initiative:** This American College of Emergency Physicians initiative aims to help EDs implement alternatives to opioids, improve their opioid prescribing practices, and adopt MAT and other harm reduction strategies. https://www.acep.org/administration/quality/equal/emergency-quality-network-e-qual/e-qual-opioid-initiative/
- **Faster Paths to Treatment:** This collaboration between the Boston Medical Center (BMC) Department of Emergency Medicine and General Internal Medicine Section is a program that draws on existing BMC services and incorporates MAT among other ED approaches. https://www.bmc.org/programs/faster-paths-to-treatment

- **Guidelines for Medication for Addiction Treatment for Opioid Use Disorder within the Emergency Department:** The Massachusetts Health and Hospital Association created guidelines for its members and other facilities wishing to employ MAT. http://patientcarelink.org/wp-content/uploads/2019/01/18-01-04MATguidelinesNEWFINAL.pdf
- **Medications for Opioid Use Disorder, SAMHSA Treatment Improvement Protocol (TIP 63) For Healthcare and Addiction Professionals, Policymakers, Patients, and Families:** This treatment improvement protocol describes strategies and services needed to address the needs of individuals with OUD**.** https://store.samhsa.gov/product/TIP-63-Medications-for-Opioid-Use-Disorder-Full-Document/PEP20-02-01-006
- **NIDA's ED Buprenorphine Resources:** A comprehensive source of buprenorphine treatment algorithms, home induction instructions, referral forms, videos of motivational interviews including adults and adolescents in varying stages of readiness, videos of actual programs transitioning research into practice, and frequently asked questions and answers. https://www.drugabuse.gov/ed-buprenorphine
- **Using Alternatives to Opioids (ALTOs) in Hospital Emergency Departments Pre-Launch Checklist:** This checklist, designed to assist in the implementation of Colorado's Using Alternatives to Opioids (ALTO) project, includes descriptions and timelines for each role of an Opioid Safety Team. https://cha.com/wp-content/uploads/2018/01/CHA-Opioid-Checklist.pdf
- Yale ED-Initiated Buprenorphine Resources Site: The website includes resources that can help program developers think through integrating MAT into ED settings. The website provides an overview of each of the components of the Buprenorphine Integration Pathway, which depicts the flow of the individuals from ED presentation to discharge. Quick start documents provide important information such as medication algorithms. https://medicine.yale.edu/edbup/overview/

# Treatment Locators

ED staff should establish good rapport with community services to ensure seamless transitions in care. Relationships with outpatient service providers should be developed at the local level. There are also national treatment locator databases that can help identify these providers.

- **SAMHSA Treatment Locator** https://findtreatment.gov/
- **American Society of Addiction Medicine (ASAM) Treatment Locator** https://www.asam.org/advocacy/aaam/patient-resources

# Emergency Department Staff Training Resources

Waiver training is required for physicians, nurse practitioners, and physician assistants for prescribing buprenorphine. Different requirements apply depending on the licensure of ED staff through the Drug Enforcement Agency (DEA).

Additionally, there are a number of resources available for training ED staff more generally on MAT. Guidelines are available for engaging individuals with MAT and providing appropriate treatment options.

## DATA Waiver Training

- **American Academy of Addiction Psychiatry Buprenorphine Waiver Trainings** Courses are provided through the Providers Clinical Support System (PCSS). PCSS provides the DATA waiver course at no cost in a variety of formats which fulfills the eight hour requirement for physicians and the 24 hour requirement for nurse practitioners and physician assistants. https://www.aaap.org/education/mat-waiver-training/
- **Provider Clinical Support System Physician 8-Hour DATA Waiver Training: Online, Blended, or In-Person:** This PCSS training fulfills the eight hours of training requiredfor physicians to apply for the buprenorphine waiver. https://pcssnow.org/medication-assisted- treatment/waiver-training-for-physicians/

## Other Training Resources

- **Buprenorphine Use in the ED (BUPE) Tool:** This tool from the American College of Emergency Physicians and the American Society of Addiction Medicine provides information to ED staff on prescribing buprenorphine, utilizing naloxone, providing linkage to treatment, and rules and regulations for prescribing buprenorphine. https://acep.org/patient-care/bupe/
- **Opioid Overdose Prevention Toolkit as a Resource:** This toolkit offers strategies to health care providers, communities, and local governments for developing practices and policies to help prevent opioid-related overdoses and deaths. https://store.samhsa.gov/product/Opioid-Overdose-Prevention-Toolkit/SMA18-4742
- **Providers Clinical Support System:** The PCSS builds the knowledge and skills of primary care providers in evidence-based prevention, identification, and treatment of OUD. www.pcssnow.org
- **Solving the Pharmacological Mystery of Buprenorphine (1.0 CME):** This continuing medical education course provides a fundamental understanding of buprenorphine and how it can benefit individuals with OUD. http://ecme.acep.org/diweb/catalog/item?id=2279148
- **Reverse Overdose to Prevent Death:** This website provides information to resources and training for Naloxone. https://www.cdc.gov/drugoverdose/prevention/reverse-od.html.

## Client Engagement Tools

- **Decisions in Recovery: Treatment for Opioid Use Disorder:** This shared decision-making tool for MAT includes a video library of provider testimonials, recovery stories, information on the medications, and more. https://mat-decisions-in-recovery.samhsa.gov/section/footer/video_library.aspx
- **The NIDA Webpages for Motivating Individuals with OUD:** This federal resource page includes videos depicting a variety of situations and approaches to screening, intervening, treating, and managing individuals with OUD in EDs. Resources include conversation tools and strategies, OUD and withdrawal assessments, and harm-reduction strategies. https://www.drugabuse.gov/nidamed-medical-health-professionals/discipline-specific-resources/emergency-physicians-first-responders/initiating-buprenorphine-treatment-in-emergency-department/motivating-patients
- **Stem the Tide: Addressing the Opioid Epidemic:** This toolkit, developed by the American Hospital Association with the input of multidisciplinary teams, subject matter experts, and key stakeholders includes resources that hospitals and health systems can share with their clinicians, individuals with OUD, and community partners. https://www.aha.org/guidesreports/2017-11-07-stem-tide-addressing-opioid-epidemic

## Quality Improvement and Evaluation Resources

It is important to monitor program implementation, including how activities are conducted over time and if activities are being implemented as intended. It is also important to evaluate MAT program outcomes to understand how staff activities relate to client outcomes. This also provides the opportunity to apply lessons learned to future ED-initiated MAT efforts.

- **A Quality Framework for Emergency Department Treatment of OUD:** The quality improvement framework–developed from discussions at a convening of experts in May 2017 by the NIDA Center for the Clinical Trials Network–contains specific structural, process, and outcome measures to guide an emergency medicine agenda for OUD policy, research, and clinical quality improvement. https://www.annemergmed.com/article/ S0196-0644(18)31208-3/fulltext
- **RE-AIM Evaluation Framework:** This framework has been used to guide the evaluation of ED-initiated buprenorphine models and programs. http://www.re-aim.org

# Appendix 1: DSM-5 Criteria for Diagnosis of Opioid Use Disorder

## At least two criteria must be met within a 12-month period:

1. Take more/longer than intended
2. Desire/unsuccessful efforts to quit opioid use
3. A great deal of time taken by activities involved in use
4. Craving, or a strong desire to use opioids
5. Recurrent opioid use resulting in failure to fulfill major role obligations
6. Continued use despite having persistent social problems
7. Important activities are given up because of use
8. Recurrent opioid use in situations in which it is physically hazardous (e.g., driving)
9. Use despite knowledge of problems
10. Tolerance
11. Withdrawal

## Severity:

Presence of Symptoms

| | |
|---|---|
| **Mild** | 2-3 |
| **Moderate** | 4-5 |
| **Severe** | ≥ 6 |

Substance Abuse and Mental Health Services Administration: Use of Medication-Assisted Treatment in Emergency Departments. HHS Publication No. PEP21-PL-Guide-5 Rockville, MD: National Mental Health and Substance Use Policy Laboratory. Substance Abuse and Mental Health Services Administration, 2021.

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